

Woodward-Wanger Co.
Philadelphia, Pa.

Plumbing Specialties

THIS CATALOG 01500

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Philadelphia, Pa.

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Blank Specialties & Chemical Bonds

Closet Tank Fittings

Small Brass Specialties

Rubber & Fibre Specialties





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Woodward Wanger Co.



SECTION I

RUBBER, LEATHER AND FIBER
SPECIALTIES





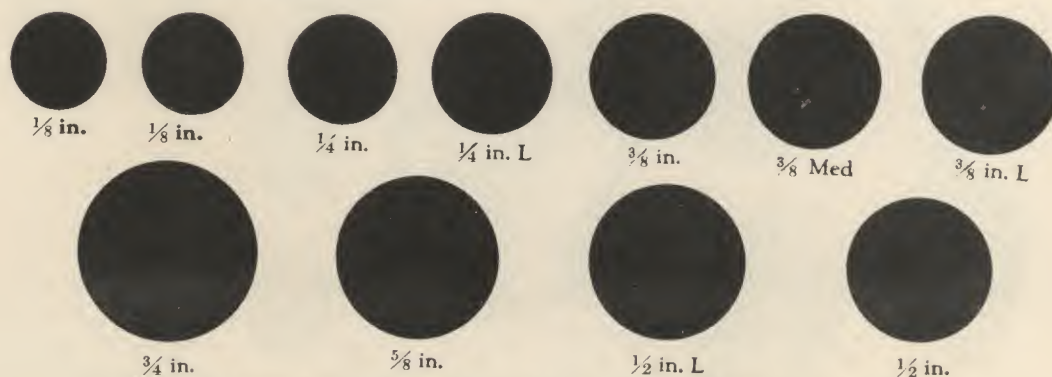
Woodward Wanger Co.



The Use for Which Our Washers are Best Suited

- NEVER-DRIP** On the practical Washer Testing Machine, shown on the opposite page, it has outlasted all other faucet washers in comparative tests. It is good for either hot or cold water; especially recommended where extremely Hot water is used.
- RHINO** A tough flexible washer, good for Hot or Cold water and particularly where ease of operation is desired. Will stand up much longer than most flexible Washers.
- DUBO** A scientific combination of Rubber and Shredded Asbestos, blended to give the highest possible abrasive test. Made in three degrees of flexibility and denseness, in order to produce as nearly as possible, an all-service washer. Furnished in Soft, Medium and Hard.
- SUPERBO** Made from the same ingredients as the "Dubo"—Rubber and Shredded Asbestos. The only difference is in the shape; the "Superbo" being a flat washer. Also supplied in Soft, Medium and Hard.
- FLEXO** Made of Cotton Fibre, glycerine cured. Good for either Hot or Cold water. Furnished in two thicknesses. We recommend the "Thin-Hard" for Hot Water and the "Thick-Soft" where faucets have defective seats.
- RED FIBER** Made of Cotton Pulp, and not acid cured. That's why our Red Fiber Washers are superior to ordinary cheap Red Fiber Washers. They are usually made of Wood Fiber, which quickly breaks down.
- LEATHER** (*Vim Chrome*). We have tried for years to get a better Leather Washer—and our efforts have been rewarded. This leather is tested for neutrality, subjected to a boiling test to determine if it is completely tanned—not just stuffed with hard greases. The pores of the leather are closed, which prevents the leather absorbing water, and rotting, as most leather washers do.
- LEATHER** Made from Leather which has been especially tanned for this work.

ACTUAL SIZES OF FAUCET WASHERS



O. D. MEASUREMENTS of FAUCET WASHERS

Washer Size	Outside Diameter of Washer	Washer Size	Outside Diameter of Washer
1/8 in.	Measures 1/2 in.	1/2 in.	Measures 3/4 in.
1/8 in. Large	Measures 17/32 in.	1/2 in. Large	Measures 13/16 in.
1/4 in.	Measures 9/16 in.	3/4 in.	Measures 27/32 in.
1/4 in. Large	Measures 5/8 in.	3/4 in.	Measures 15/16 in.
3/8 in.	Measures 21/32 in.	1 in.	Measures 1 1/8 in.
3/8 in. Medium	Measures 22/32 in.	1 1/4 in.	Measures 1-7/16 in.
3/8 in. Large	Measures 23/32 in.	1 1/2 in.	Measures 1-9/16 in.



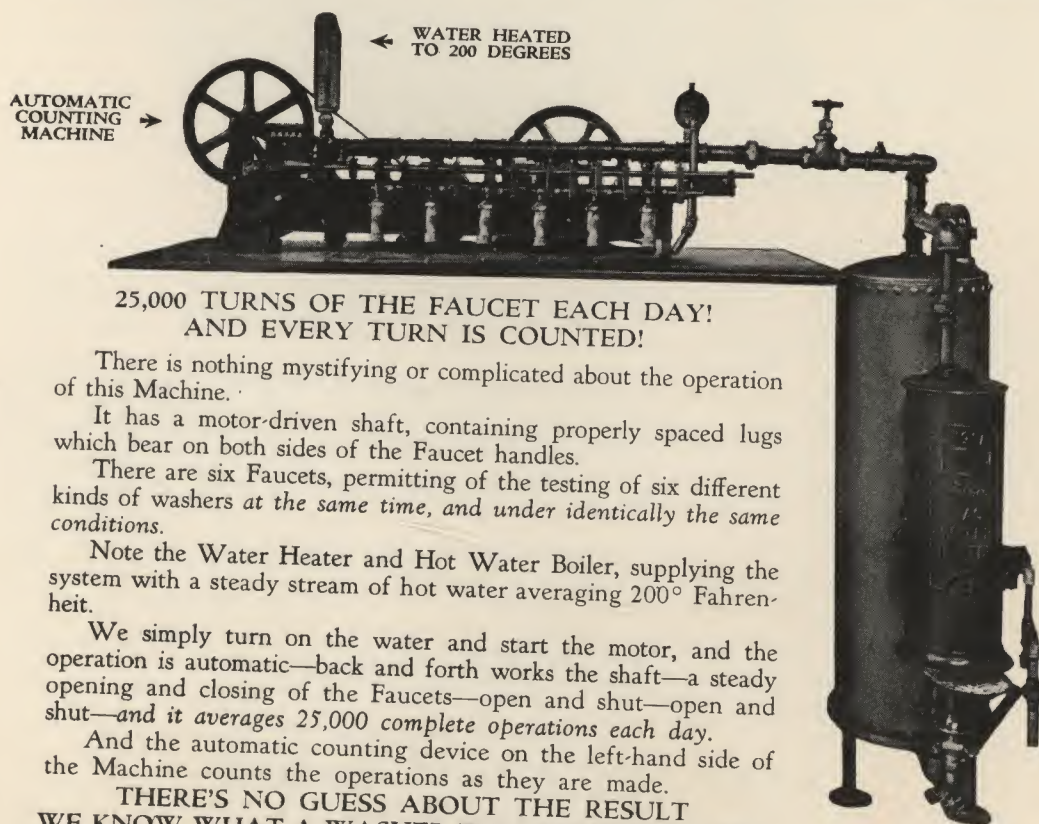
Woodward Wanger Co.



We Wanted to Know the TRUTH about Washers ~ so we built this WASHER "TESTING" MACHINE

The old way of testing a Washer was to put it on a faucet, and then see how long it would last. Or maybe the Washer was put through a boiling process, to see how long it would retain its life in hot water.

But these tests have never been satisfactory, and simply resulted in a poor guess as to their merits.



25,000 TURNS OF THE FAUCET EACH DAY!
AND EVERY TURN IS COUNTED!

There is nothing mystifying or complicated about the operation of this Machine.

It has a motor-driven shaft, containing properly spaced lugs which bear on both sides of the Faucet handles.

There are six Faucets, permitting of the testing of six different kinds of washers at the same time, and under identically the same conditions.

Note the Water Heater and Hot Water Boiler, supplying the system with a steady stream of hot water averaging 200° Fahrenheit.

We simply turn on the water and start the motor, and the operation is automatic—back and forth works the shaft—a steady opening and closing of the Faucets—open and shut—open and shut—and it averages 25,000 complete operations each day.

And the automatic counting device on the left-hand side of the Machine counts the operations as they are made.

**THERE'S NO GUESS ABOUT THE RESULT
WE KNOW WHAT A WASHER WILL DO UNDER TEST**

We could hit a Washer with an axe, but that wouldn't be the right kind of a test.

Our test is about the nearest we can come to the actual wear the Washer will receive. And if there are any imperfections, they will surely show up at the end of a day or at the end of a week.

**SIX MEN—TURNING SIX FAUCETS
ALL DAY LONG—NEVER STOPPING**



OUR MACHINE DOES THIS WORK AUTOMATICALLY

**W-W WASHERS—BEST
BY TEST**

The Faucet Washers in our line have been thoroughly tested on this Machine, and we are able to truthfully say that they will stand up under most severe conditions.

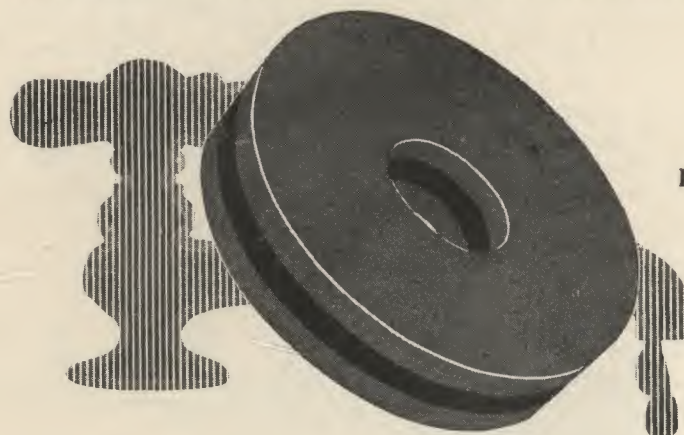


Woodward Wanger Co.



NEVER-DRIP

THE WASHER TESTED TO A MILLION FAUCET TURNS



IDENTIFIED
BY THE BLACK
STRIPE

The Faucet Washer with the Black Stripe

We have been endeavoring for years to produce a Faucet Washer with some individuality, and, at the same time, one that we could safely say was the superior of all other Washers on the market.

Our hope has been realized in the production of the "NEVER-DRIP" Faucet Washer—the Washer with the Black Stripe—the Washer Tested to a Million Faucet Turns.

THE PUBLIC DEMAND "NEVER-DRIP" WASHERS

Our National Advertising, and the fact that the "NEVER-DRIP" Washer is so easily identified by its Black Stripe, is creating an almost unbelievable demand for this Washer.

People know it by sight and by name—and they demand it. It is the ONLY Washer in the entire country known by name and by sight.

USE "NEVER-DRIP" WASHERS ON EVERY JOB

Master Plumbers are always looking for an opportunity to enhance their reputation in the minds of their customers.

Here is opportunity knocking at your door. Admit Mr. "NEVER-DRIP" FAUCET WASHER, and he will repay you many times for your confidence in him. Introduce this new friend to every customer you have—use the "NEVER-DRIP" Washer on every job.

Sold Through Master Plumbers Only

Our policy is to sell the "NEVER-DRIP" Washer through Master Plumbers only.

This means that your customers cannot purchase this Washer in the Five-and-Ten-Cent Store, nor in the Hardware Store.

It also means that they must come to you for it, and that this business belongs entirely to you—the Master Plumber.

Are you displaying these Washers in your Window and on your Show Case?

NEVER-DRIP FAUCET WASHERS

$\frac{1}{8}$ " THICK—PACKED 100 TO THE BOX

No.	Size	No.	Size
O-59.....	(small) $\frac{1}{8}$ in. S	O-64.....	$\frac{1}{2}$ in.
O-60.....	$\frac{1}{8}$ in.	O-65.....	(large) $\frac{1}{2}$ in. L
O-61.....	$\frac{1}{4}$ in.	O-66.....	$\frac{5}{8}$ in.
O-72.....	(large) $\frac{1}{4}$ in. L	O-67.....	$\frac{3}{4}$ in.
O-62.....	$\frac{3}{8}$ in.	O-68.....	1 in.
O-63.....	(large) $\frac{3}{8}$ in. L		
O-58.....	(medium) $\frac{3}{8}$ in. M		

EVERY FAUCET NEEDS A NEVER-DRIP—JUST ONCE



Woodward Wanger Co.



NEVER-DRIP

ASSORTMENTS



A-O-73



A-O-74

BECAUSE NEVER-DRIP WASHERS

are so universally acknowledged to be the "peer" of Washers (especially for extremely hot water,) we have found a persistent demand for Boxes of Assorted Sizes.

POPULAR "NEVER-DRIP" ASSORTMENTS

125 ASSORTED SIZES

A-O-73—125 Assorted Never-Drip as follows:

10— $\frac{1}{8}$ ", 25— $\frac{1}{4}$ ", 25— $\frac{1}{4}$ "L,
45— $\frac{3}{8}$ ", 10— $\frac{3}{8}$ "L, 10— $\frac{1}{2}$ "

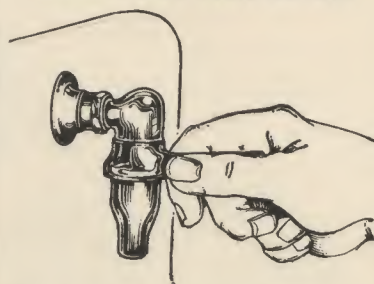
500 ASSORTED SIZES

A-O-74—500 Assorted Never-Drip as follows:

50— $\frac{1}{8}$ ", 100— $\frac{1}{4}$ ", 100— $\frac{1}{4}$ "L,
150— $\frac{3}{8}$ ", 50— $\frac{3}{8}$ "L, 50— $\frac{1}{2}$ "

Assortments will be changed to suit customer at no additional charge

WHAT OUR TEST MEANS



Take hold of a Faucet Handle, and start opening and closing it.
Suppose you did this 25,000 times per day and for FORTY CONSECUTIVE DAYS—making ONE MILLION complete operations? That's the test that the "NEVER-DRIP" Faucet Washer has stood.



Woodward Wanger Co.



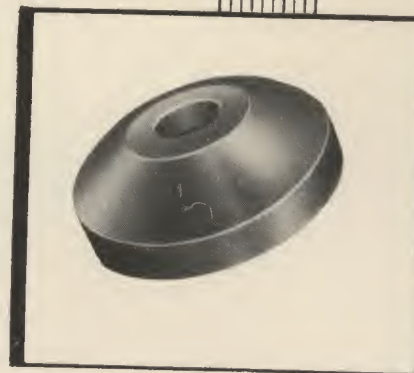
TOUGH :: FLEXIBLE

Rhino

BEVELED

Faucet Washers

THE RHINO FAUCET WASHER is the result of several years of experimenting and testing, because we decided at the start not to be satisfied with just another flexible washer. We knew the short-comings of flexible washers—they wouldn't stand up.



We wanted something better—and WE HAVE IT—thanks to the newly discovered LA-TEX-TOL—a new form of treating rubber, which reduces it to its highest "punishment-resisting" form. The RHINO is the toughest moderately flexible washer ever made.

BEVELED "RHINO" WASHERS

No.	Size	No.	Size
65	1/8"	68	3/8"
66	1/4"	69	(large) 3/8" L
67	(large) 1/4" L	71	(medium) 3/8" M
		70	1/2"

"Rhino" Assortments

125 ASSORTED SIZES

A-77—125 Assorted Beveled Rhino as follows:

10—1/8", 25—1/4", 25—1/4"L,
45—3/8", 10—3/8"L, 10—1/2"

500 ASSORTED SIZES

A-78—500 Assorted Beveled Rhino as follows:

50—1/8", 100—1/4", 100—1/4"L,
150—3/8", 50—3/8"L, 50—1/2"

Assortments will be changed to suit customer at no additional charge





Woodward Wanger Co.



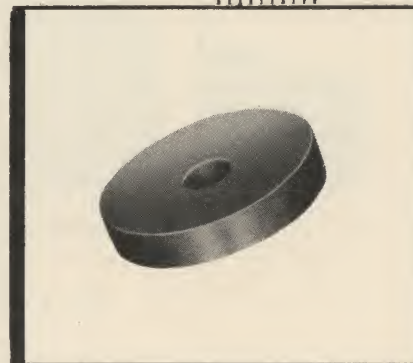
Rhino

FLAT

TOUGH :: FLEXIBLE

Faucet Washers

THE FLAT RHINO WASHER was added to the line because of the immediate popularity of the "beveled" Rhino. Plumbers found this washer so superior in its lasting quality over most flexible washers, that they at once began demanding the same washer in the flat form.



THE FLAT RHINO is made from the same material as the beveled Rhino—LATEX-TOL—which is rubber in its most rugged form—a new method of processing which renders it almost immune to punishment.

FLAT "RHINO" WASHERS

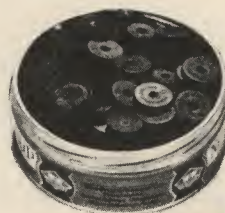
No.	Size	No.	Size
144	$\frac{1}{8}$ "	148	(large) $\frac{3}{8}$ " L
145	$\frac{1}{4}$ "	151	(medium) $\frac{3}{8}$ " M
146	(large) $\frac{1}{4}$ " L	149	$\frac{1}{2}$ "
147	$\frac{3}{8}$ "		

"Rhino" Assortments

125 ASSORTED SIZES

A-151—125 Assorted Flat Rhino as follows:

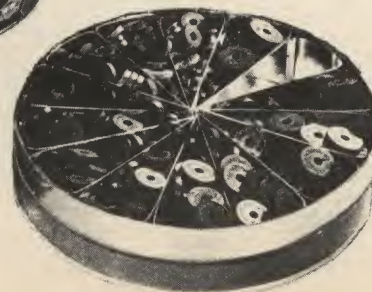
25— $\frac{1}{4}$ ", 25— $\frac{1}{4}$ " L, 45— $\frac{3}{8}$ ",
20— $\frac{3}{8}$ " L, 10— $\frac{1}{2}$ "



500 ASSORTED SIZES

A-152—500 Assorted Flat Rhino, as follows:

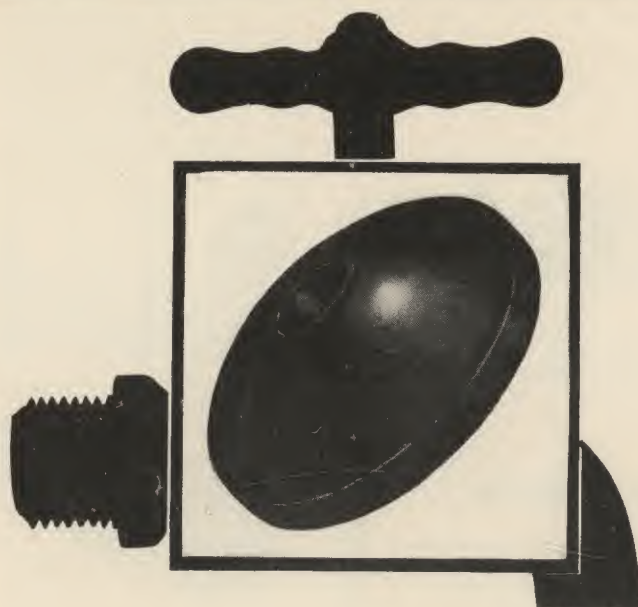
100— $\frac{1}{4}$ ", 100— $\frac{1}{4}$ " L, 150— $\frac{3}{8}$ ",
100— $\frac{3}{8}$ " L, 50— $\frac{1}{2}$ "



Assortments will be changed to suit customer at no additional charge



Woodward Wanger Co.



"DUBO" WASHERS

For Hot and Cold Water
BEVELED—DOUBLE-SEATING



(MADE FROM RUBBER AND ASBESTOS)

Our Hard and Medium "DUBO" Faucet Washers contain a large percentage of pure Asbestos, insuring greater durability and lasting resiliency.

This illustration shows a piece of crude Asbestos just as it comes from the mine, split to show the mineral fibers.



Asbestos is one of the most remarkable substances found in nature.

It has lain in the earth millions of years, unaffected by any of the forces of rot, decay or disintegration.

Asbestos will withstand flame and high temperatures, and is immune against the action of the chemicals in water.

DUBO Faucet Washer Assortments

125 ASSORTED SIZES

A-55—125 Assorted Dubo as follows:

10— $\frac{1}{8}$ ", 25— $\frac{1}{4}$ ", 25— $\frac{1}{4}$ "L, 45— $\frac{3}{8}$ ",
10— $\frac{3}{8}$ "L, 10— $\frac{1}{2}$ "

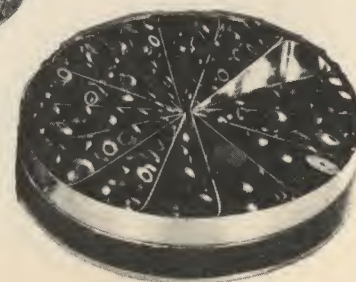
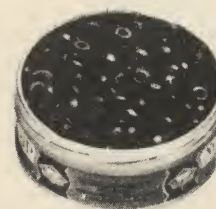
500 ASSORTED SIZES

A-56—500 Assorted Dubo as follows:

50— $\frac{1}{8}$ ", 100— $\frac{1}{4}$ ", 100— $\frac{1}{4}$ "L,
150— $\frac{3}{8}$ ", 50— $\frac{3}{8}$ "L, 50— $\frac{1}{2}$ "

Assortments will be changed to suit customer at no additional charge

Specify Whether Hard, Medium or Soft is Wanted





Woodward Wanger Co.



Faucet DUBO Washer

The famous ALL-PURPOSE Washer, made in three grades
SOFT—MEDIUM—HARD

BEVELED
DOUBLE SEATING



PACKED 100 IN
LOCK TOP CAN

DUBO HARD

H-56.....	$\frac{1}{8}$ "	H-50.....	$\frac{1}{2}$ "
H-47.....	$\frac{1}{4}$ "	H-51..... (large)	$\frac{1}{2}$ " L
H-54.....	$\frac{1}{4}$ " L	H-52.....	$\frac{5}{8}$ "
H-48.....	$\frac{3}{8}$ "	H-53.....	$\frac{3}{4}$ "
H-49..... (large)	$\frac{3}{8}$ " L		

DUBO MEDIUM

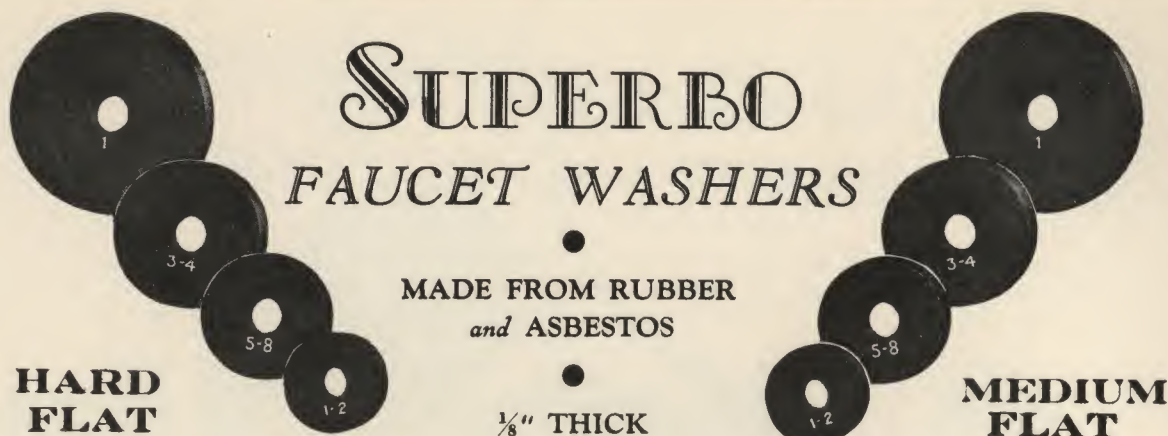
M-56.....	$\frac{1}{8}$ "	M-50.....	$\frac{1}{2}$ "
M-47.....	$\frac{1}{4}$ "	M-51..... (large)	$\frac{1}{2}$ " L
M-54.....	$\frac{1}{4}$ " L	M-52.....	$\frac{5}{8}$ "
M-48.....	$\frac{3}{8}$ "	M-53.....	$\frac{3}{4}$ "
M-49..... (large)	$\frac{3}{8}$ " L		

DUBO SOFT

S-56.....	$\frac{1}{8}$ "	S-50.....	$\frac{1}{2}$ "
S-47.....	$\frac{1}{4}$ "	S-51..... (large)	$\frac{1}{2}$ " L
S-54.....	$\frac{1}{4}$ " L	S-52.....	$\frac{5}{8}$ "
S-48.....	$\frac{3}{8}$ "	S-53.....	$\frac{3}{4}$ "
S-49..... (large)	$\frac{3}{8}$ " L		



Woodward Wanger Co.



THE "SUPERBO" WASHER is made of exactly the same composition (Rubber and Asbestos) as our famous Dubo. It is really a flat "Dubo" and distinguished in shape by the name Superbo. It contains sufficient shredded Asbestos to insure perfect resistance to heat and consequently gives excellent service on hot water faucets. At the same time its flexibility, especially in the "medium" grade, makes it a very satisfactory washer for cold water. The "Superbo" will not crack or gum. Made in regular and Special sizes.

Hard "Superbo" Washers

PACKED 100 PER CARTON

No.	Size	No.	Size
H-74.....(large)	1/4" L	H-79.....(large)	1/2" L
H-75.....	1/4"	H-80.....	5/8"
H-76.....	3/8"	H-81.....	3/4"
H-77.....(large)	3/8" L	H-82.....	1"
H-78.....	1/2"		

Medium "Superbo" Washers

This Medium "Superbo" Washer is made of the same composition as the Hard "Superbo," but cured to a greater degree of flexibility for those who prefer this type washer.

PACKED 100 PER CARTON

No.	Size	No.	Size
M-74.....(large)	1/4" L	M-79.....(large)	1/2" L
M-75.....	1/4"	M-80.....	5/8"
M-76.....	3/8"	M-81.....	3/4"
M-77.....(large)	3/8" L	M-82.....	1"
M-78.....	1/2"		

Soft "Superbo" Washers

WITHOUT ASBESTOS

There is no Asbestos in the "Soft" Superbo. It is made from tough non-blooming Pure India Rubber Stock. Makes an excellent ball cock washer, or can be used wherever a "Soft" washer is needed.

S-74.....(large)	1/4" L	S-79.....(large)	1/2" L
S-75.....	1/4"	S-80.....	5/8"
S-76.....	3/8"	S-81.....	3/4"
S-77.....(large)	3/8" L	S-82.....	1"
S-78.....	1/2"		



Woodward Wanger Co.



FLEXO

Bibb Washers

TWO DEGREES
OF HARDNESS

TWO DEGREES
OF THICKNESS



COTTON FIBER—GLYCERINE CURED
(Packed 100 per Carton)

Thin Hard "Flexo" Faucet Washers— $\frac{1}{8}$ in. Thick

No.	Size	No.	Size
0	$\frac{1}{8}$ in.	4	$\frac{1}{2}$ in.
1	$\frac{1}{4}$ in.	5	(large) $\frac{1}{2}$ in. L
11	(large) $\frac{1}{4}$ in. L	6	$\frac{5}{8}$ in.
2	$\frac{3}{8}$ in.	7	$\frac{3}{4}$ in.
3	(large) $\frac{3}{8}$ in. L		

Thin Soft "Flexo" Faucet Washers— $\frac{1}{8}$ in. Thick
(Packed 100 per Carton)

No.	Size	No.	Size
14	$\frac{1}{8}$ in.	17	(large) $\frac{3}{8}$ in. L
15	$\frac{1}{4}$ in.	18	$\frac{1}{2}$ in.
25	(large) $\frac{1}{4}$ in. L	19	(large) $\frac{1}{2}$ in. L
16	$\frac{3}{8}$ in.	20	$\frac{5}{8}$ in.

Thick Soft "Flexo" Faucet Washers— $\frac{3}{16}$ in. Thick
(Packed 100 per Carton)

No.	Size	No.	Size
29	$\frac{1}{8}$ in.	35	$\frac{5}{8}$ in.
30	$\frac{1}{4}$ in.	36	$\frac{3}{4}$ in.
40	(large) $\frac{1}{4}$ in. L	37	1 in.
31	$\frac{3}{8}$ in.	38	$1\frac{1}{4}$ in.
32	(large) $\frac{3}{8}$ in. L	39	$1\frac{1}{2}$ in.
33	$\frac{1}{2}$ in.		
34	(large) $\frac{1}{2}$ in. L		



Woodward Wanger Co.



Red Fiber Faucet Washers



These washers are made from best grade of Red Fiber and guaranteed to be the highest quality of this class of goods.
Clean-cut and uniform in shape—closely inspected before packing.

No.	Size	No.	Size
105.....	$\frac{1}{4}$ in.	108.....	$\frac{1}{2}$ in.
104.....	(large) $\frac{1}{4}$ in. L	109.....	(large) $\frac{1}{2}$ in. L
106.....	$\frac{3}{8}$ in.	110.....	$\frac{5}{8}$ in.
107.....	(large) $\frac{3}{8}$ in. L	111.....	$\frac{3}{4}$ in.

"Vim" Chrome Leather Washers



(Vim Chrome). We have tried for years to get a better Leather Washer—and our efforts have been rewarded. This leather is tested for neutrality, subjected to a boiling test to determine if it is completely tanned—not just stuffed with hard greases. The pores of the leather are closed, which prevents the leather absorbing water, and rotting, as most leather washers do.

No.	Size	No.	Size
135.....	$\frac{1}{4}$ in.	137 $\frac{1}{2}$	(large) $\frac{1}{2}$ in. L
135 $\frac{1}{2}$	(large) $\frac{1}{4}$ in. L	138.....	$\frac{5}{8}$ in.
136.....	$\frac{3}{8}$ in.	139.....	$\frac{3}{4}$ in.
136 $\frac{1}{2}$	(large) $\frac{3}{8}$ in. L	140.....	1 in.
137.....	$\frac{1}{2}$ in.		

Leather Faucet Washers



Made from a good grade of leather, cured with special oil compound, insuring long wear and good service. Exact in size and uniform throughout.

No.	Size	No.	Size
135-R.....	$\frac{1}{4}$ in.	137 $\frac{1}{2}$ -R.....	(large) $\frac{1}{2}$ in. L
135 $\frac{1}{2}$ -R.....	(large) $\frac{1}{4}$ in. L	138-R.....	$\frac{5}{8}$ in.
136-R.....	$\frac{3}{8}$ in.	139-R.....	$\frac{3}{4}$ in.
136 $\frac{1}{2}$ -R.....	(large) $\frac{3}{8}$ in. L	140-R.....	1 in.
137-R.....	$\frac{1}{2}$ in.		



Woodward Wanger Co.



The "Enduro" Fuller Ball



Nos. 270-278

"Enduro" Fuller Balls are Carefully Moulded from a Special Compound of Pure Rubber and Shredded Asbestos

The "ENDURO," so far as quality is concerned, is the **Aristocrat** among Fuller Balls. It is made not only to sell, but also to work and last, absolutely no Graphite or other cheap filler or lubricant being used in its manufacture.

Carefully vulcanized to the exact degree of density to allow of sure and easy seating capacity, and, at the same time, to insure that the hottest water will not cause them to swell, crack or gum.

The shape of the "ENDURO" is absolutely correct for the best results in practical use, and the sizes, which are accurate and cover the whole range of Fuller work from $\frac{3}{8}$ to 1 inch, including the intermediate sixteenths, enable the Plumber to fit properly, and without loss of time, all of the numerous styles and sizes of Fuller Faucets used in different localities.

While the "ENDURO" is unequalled for hot water, it is just as good for cold.

ORDER BY NUMBER

No.	Size	No.	Size
270	$\frac{3}{8}$ in.	275	$\frac{3}{4}$ in.
271	$\frac{1}{2}$ in.	276	$\frac{1}{2}$ in.
272	$\frac{1}{4}$ in.	277	$\frac{1}{8}$ in.
273	$\frac{5}{8}$ in.	278	$\frac{7}{8}$ in.
274	$\frac{1}{16}$ in.		1 in.

"Enduro" Fuller Balls
Contain a Large
Percentage of
Pure Asbestos

This illustration shows a piece of crude Asbestos, just as it comes from the mine, split to show the mineral fibers.



Asbestos is one of the most remarkable substances found in nature.

Its unique properties are unparalleled. Wood burns — Asbestos will withstand flame and high temperatures. Stone disintegrates — Asbestos long resists erosion. Steel rusts — Asbestos is immune.



No. 280



No. 281

Special Fuller Balls
FOR "PECK" FIXTURES

No.	Size
280	$\frac{1}{2}$ in.
281	$\frac{5}{8}$ in.



Woodward Wanger Co.



SPECIAL COMPRESSION WASHERS

KOHLER COMPRESSION WASHER



Our No.	Kohler No.	Inside Dia.	Out. Dia.
O 59.....	10745— $\frac{3}{8}$ "	3/16"	$\frac{1}{2}$ "
O-72.....	10745— $\frac{1}{2}$ "	3/16"	$\frac{5}{8}$ "
O-66.....	10745— $\frac{3}{4}$ "	3/16"	$\frac{7}{8}$ "

CRANE WASHERS



Outside Diameter
of Washer

204—Crane No. 2.....	19/32 in.
205—Crane No. 4.....	21/32 in.
208—Crane No. 6.....	$\frac{3}{4}$ in.
209—Crane No. 8.....	$\frac{7}{8}$ in.

W-W TOP PACKING



1180-S, Small Size for Basin Faucets
1180 - Large Size for Bath Faucets

Come in Sets of Three, (1) Packing, (1) Fibre Washer, (1) Brass Washer

Double Seat Faucet Washers
FOR MUELLER STYLE FAUCETS



90 91 92 93

Use Prefix "S" for Soft and "H" for Hard

No.	Packed 100 per Carton	Outside Diameter
90		$\frac{17}{32}$ in.
91		$\frac{19}{32}$ in.
92		$\frac{21}{32}$ in.
93		$\frac{23}{32}$ in.

BELL SUPPLY WASHERS



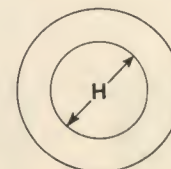
COTTON FIBER

	Thickness	Hole	Diam.
42	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$1\frac{1}{8}$ in.

RUBBER

No.	Thickness	Hole	Diam.
44	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$1\frac{1}{8}$ in.
45	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$1\frac{1}{8}$ in.
46	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$1\frac{1}{4}$ in.

BASHLIN COMPRESSION WASHERS



Our No.

130	$\frac{3}{8}$ " Seat Rings; H-Measures $\frac{7}{16}$ "
131	$\frac{1}{2}$ " Seat Rings; H-Measures $\frac{1}{2}$ "
132	$\frac{3}{4}$ " Seat Rings; H-Measures $\frac{9}{16}$ "

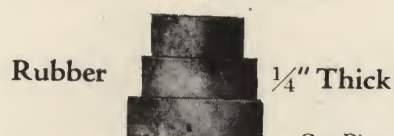


Woodward Wanger Co.



SPECIAL COMPRESSION WASHERS

Solid Faucet Discs

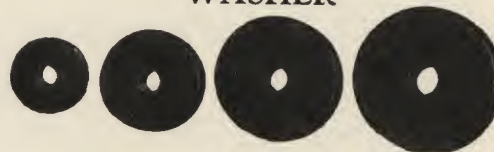


No.	Out. Dia.	Size
201.....	3/4 in.	1/2 in.
202.....	7/8 in.	5/8 in.

Garden Valve Washers
SAME AS OUR FAMOUS NEVER-DRIIP WASHER
Packed 100 per Carton

No.	Size
95.....	3/4 in.
96.....	1 in.

STANDARD COMPRESSION WASHER



Our No.	Outside Dia.	Inside Dia.	Thick
29-S.....	1/2"	7/32"	3/16"
29-H.....	1/2"	7/32"	3/16"
O-58.....	11/16"	3/16"	1/8"
O-60.....	17/32"	3/16"	1/8"
O-72.....	5/8"	3/16"	1/8"

FOR STANDARD FAUCET

CHICAGO FAUCET

Quatern Repairs



No. 210 (Part 1-14) 1 1/4" Hex.
Cap Chrome



No. 210 1/2 (Part 1-43) Cap
Gasket



No. 211 (Part 1-99) Right
Hand unit less Cap

No. 211 1/2 (Part 1-100) Left
Hand unit less Cap

NOTE

No. 212 (No. 377) Left Hand unit with
long stem for lavatory fixtures with
concealed caps.

No. 212 1/2 (No. 274-3) Left Hand long
type stem for lavatory fixtures.

No. 213 (No. 274-4) Rough Brass Cap
for lavatory fixtures.

No. 213 1/2 (No. 177-39) Long Handle
Screw for China Handles No. 237.

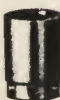
No. 214 (No. 420-10) Handle Screw for
No. 368 and No. 369 Lever Handles.

No. 214 1/2 (Part 1-17) Handle Screw.

No. 215 (Part 1-19) Asbestos Packing
Washer.



No. 215 1/2 (Part 1-20) Brass
Flat Washer 13/16" Outside
Diameter.



No. 216 (Part 1-15) Right
Hand Stem.



No. 216 1/2 (Part 1-16) Left
Hand Stem.



No. 217 (Part 1-28) Left Hand
Sleeve.



No. 217 1/2 (Part 1-29) Right
Hand Sleeve.



No. 218 (Part 1-27) Monel
Metal Seat 13/16" Outside
Diameter.



No. 206-H (Part 1-21) Hard
Seat Washer (Rhino Stock)



No. 206-S (Part 1-21) Soft
Rubber Seat Washer.



No. 207 (Part 1-22) Brass
Washer Retainer 5/8" Out-
side Diameter.



No. 219 (Part 1-31) Stem
Nut Washer 7/16" Outside
Diameter.



No. 219 1/2 (Part 1-18) Stem
Nut.

All Numbers Shown in Brackets () are the Manufacturers own Catalog Numbers.



Woodward Wanger Co.



Trico Top Faucet Washers



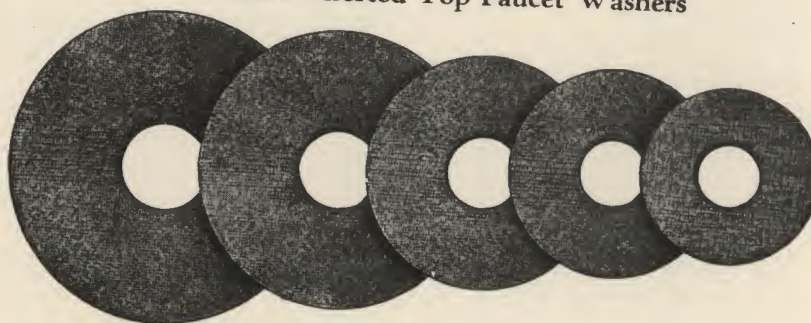
Seven layers of Stockinet
with pure Para Rubber

The Trico is made from seven layers of this Stockinet, closely cemented together with Pure Para Rubber and the stock thus made is cured under heavy pressure. From this stock is cut the various sizes of the Trico Washers, extreme care being used at every step of the making to insure uniform thickness and accurate sizes.

Containing the best materials and made with the utmost care, the result is that the Trico has no superior as a Top Faucet Washer and can be depended upon to give perfect satisfaction.

No.	Size	No.	Size
225	O. D. 15/16"	228	O. D. 1 3/8"
226	O. D. 1 1/8"	229	O. D. 1 1/2"
227	O. D. 1 1/4"		

Cloth Inserted Top Faucet Washers



No.	Size	No.	Size
240	O. D. 15/16"	242	O. D. 1 1/4"
241	O. D. 1 1/8"	243	O. D. 1 3/8"

SPECIAL OR UNUSUAL WASHERS—MADE TO ORDER

FIBER An initial charge of \$3.00 is made for the die, plus the cost of the washers, determined by the size and the quantity wanted. The proper way is to submit a sample, telling us the quantity wanted, and we will submit quotation.

RUBBER Quotations will be promptly given on special or unusual sizes if you submit us a sample and tell us the quantity wanted. If this is impossible—give accurate Inside and Outside Diameter and thickness.

LEATHER We can make up leather washers in special sizes and will quote prices if you will submit us a sample of the washer you wish duplicated. If this is impossible—give accurate Inside and Outside Diameter measurements and thickness.

No "Specially Made" Washers are returnable under any circumstances.



A large, dark, cylindrical container, likely a drum or barrel, with the text "WOODWARD WANGER" printed on its top surface. The container is shown from a low angle, emphasizing its height and rounded form. The background is a light, textured surface.

5cts.

The only Tank Ball that has been *Nationally*
Advertised to the Consumer in Consumer Magazines

STOP THAT LEAK!

The Famous
CUSHIONED
MUSHROOM
Paraballs

is NOW \$1.00 at your plumber's

It ends noise, waste and the foul rubbery odor of that faulty old ball in your toilet tank. Guaranteed 3 years. Ask your plumber about installing one today.

A WOODWARD-WANGER HOUSEHOLD PRODUCT



Woodward Wanger Co.



HEAVY DUTY
STYLE BALL

SOLD BY MASTER
PLUMBERS ONLY

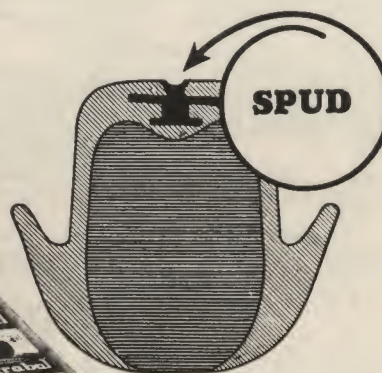


Heavy Duty MUSHROOM Parabal

This is the original Mushroom Parabal, now called the Heavy Duty Mushroom, and it is still the choice of many Plumbers who have sold it for years. It is a one piece pure rubber ball, reinforced at the seating point of the ball, where it contacts the flush valve. This ball will give satisfactory service over a long period of years.



Heavy Duty Mushroom Parabals are
attractively boxed



Note the wide double flange spud. It cannot pull out. Note also the sturdy construction of the bulb itself and how the walls are reinforced where it contacts the seat of the valve.

SIZES

No. 314.....small	2" and 2 1/8"
No. 315.....small-medium	2 1/8" and 2 1/4"
No. 316.....medium	2 1/4", 2 3/8" and 2 1/2"
No. 318.....large	2 3/8", 2 3/4" and 3"



Woodward Wanger Co.



A TANK BALL WITH DISTINCT INDIVIDUALITY

ONE PIECE
RUBBER



OUTSELLS ALL
OTHERS

Cushioned MUSHROOM Parabal

This ball was designed and built with the idea of making it the finest thing of its kind—a tank ball undeniably superior to all others. In this ball we have given the Master Plumber something to sell that is distinctive in shape—a ball that cannot be confused with any other.



- (1) A one-piece pure Rubber Ball
- (2) Nationally Advertised to the Consumer
- (3) Distinctive in Shape and patented
- (4) Longer bearing on the valve seat making a positive shut-off
- (5) A three year guarantee
- (6) Put up in an attractive display carton
- (7) Wide Flange on spud cannot pull out

SIZES

No. 282	2"
No. 284	2 1/4"
No. 285	2 3/8"
No. 286	2 1/2"
No. 287	2 5/8"
No. 288	2 3/4"



Woodward Wanger Co.



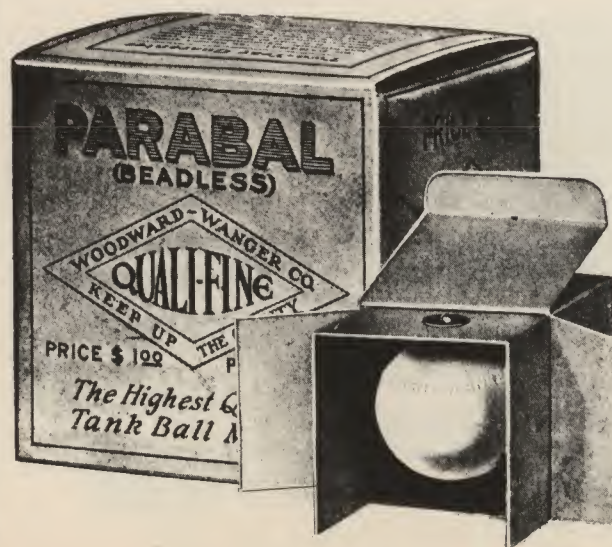
HIGHEST QUALITY WHITE TANK BALL

Seamless and Beadless

The Parabal



A seamless, beadless white Ball, strongly reinforced at the top to insure the ball holding its shape. The bottom is soft and pliable. The best tank Ball of this type on the market. The flanged spud cannot pull out.



MADE IN THESE SIZES

No. 300	2"
No. 302	2 1/4"
No. 304	2 1/2"
No. 305	2 5/8"
No. 306	2 3/4"



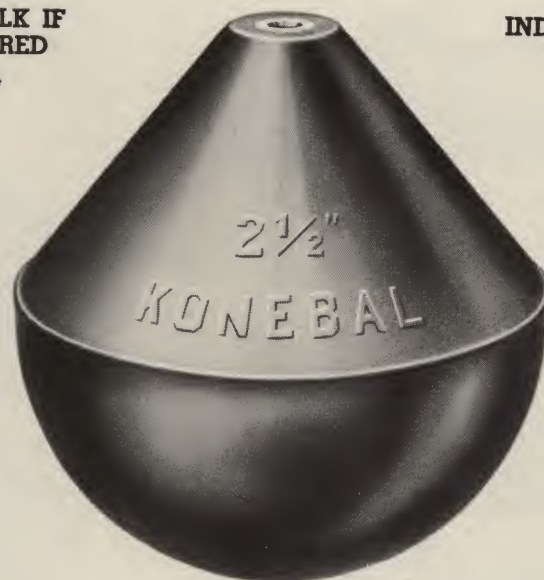
Woodward Wanger Co.



THE BEST VALUE IN THE LOW PRICED FIELD

•
IN BULK IF
DESIRED
•

•
INDIVIDUALLY
BOXED
•



Shiny Black

KONE-BAL

We honestly believe that this modestly priced tank ball represents the most value ever offered within the same price range. It is made from a much better quality of rubber than most manufacturers deem necessary in a ball sold at this price.

The Kone shape is both popular and satisfactory. Each ball is separately boxed or, you can get them at a still lower price in bulk, packed in egg crate fashion.

SIZES

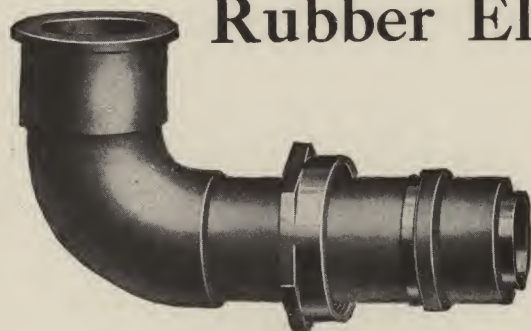
No. 294	2"
No. 295	2 1/2"
No. 296	2 3/4"



Woodward Wanger Co.



Rubber Elbows



Regular Pattern Rubber Elbows

With Straight Brass Ferrule

Packed 6 per Carton

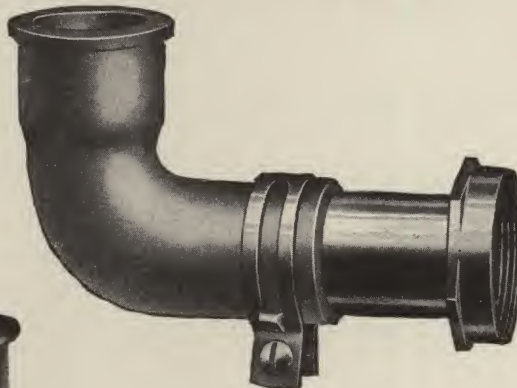
No.	Size Outlet	Size for Flush Pipe	Length Back to End	Height
320	1 1/4 in.	1 1/4 in.	5 1/2 in.	3 in.
321	1 1/2 in.	1 1/4 in.	5 1/2 in.	3 in.
322	1 1/2 in.	1 1/2 in.	5 1/2 in.	3 in.
323	2 in.	2 in.	5 1/2 in.	3 in.



Full Opening Extension Rubber Elbow

Packed 6 per Carton

No.	Size Outlet	Size for Flush Pipe	Length Back to End	Height
327	1 1/4 in.	1 1/4 in.	7 in.	3 in.
328	1 1/2 in.	1 1/4 in.	7 in.	3 in.
329	1 1/4 in.	1 1/2 in.	7 in.	3 in.
330	1 1/2 in.	1 1/2 in.	7 in.	3 in.

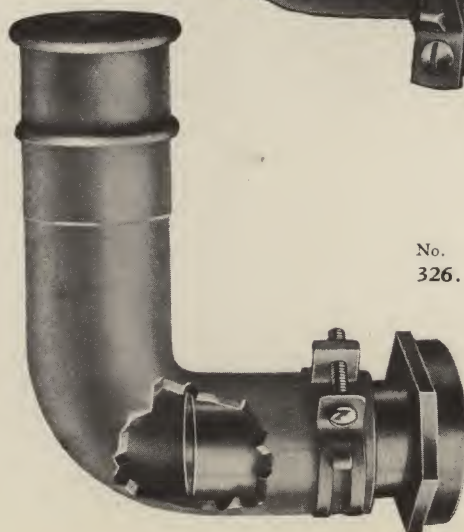


Climax Rubber Elbow

(Short Adjustable)

Packed 6 per Carton

No.	Size Outlet	Size for Flush Pipe	Length Back to End	Height
325	1 1/4 in.	1 1/4 in.	5 in.	3 in.



Extra Long Inlet Rubber Elbow

Packed 12 per Carton

No.	Size Outlet	Size for Flush Pipe	Length Back to Spud End	Height
326.....	1 1/4 in.	1 1/4 in.	5 in.	4 3/4 in.

ELBOW RUBBERS ONLY

(Not Illustrated)

320-R	322-R	325-R	327-R	329-R
321-R	323-R	326-R	328-R	330-R

Same as illustrated above, only -R means Rubber Only, no Metal trimmings.



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Gaskets



Basin Gaskets

No.	Size Inside Diameter	Size Outside Diameter
365	1 1/4 in.	2 in.



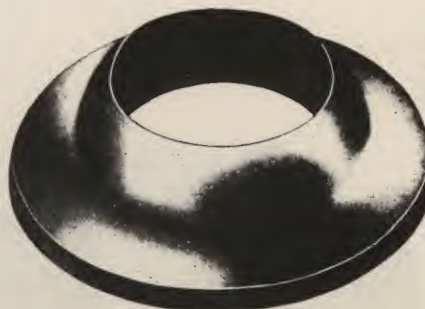
Bath Gaskets

No.	Size Inside Diameter	Size Outside Diameter
367	1 3/4 in.	2 1/8 in.



Sink Gaskets

No.	Inside Diameter	Outside Diameter
370	1 1/4 in.	2 1/2 in.



Sink Gaskets

No.	Size Inside Diameter	Size Outside Diameter
369	1 1/2 in.	2 5/8 in.

Beveled C. W. & O. Washer For Connected Waste and Overflow

No.	Size Inside Diameter	Size Outside Diameter	Least Thickness	Greatest Thickness
520	1 7/8 in.	2 1/8 in.	1/8 in.	3/2 in.



Faucet Flange Gasket

Pure White Rubber,

No.	Size Inside Diameter	Size Outside Diameter	Least Thickness	Greatest Thickness
524	2 inch O. D. x 1 inch I. D. x 1/2 inch thick			



Flat Washer for Bath Waste

No.	Size Inside Diameter	Size Outside Diameter
525	1 1/8 in.	2 5/8 in.

Steam Specialties & Chemical Goods

Closet Tank Fittings

Small Brass Specialties

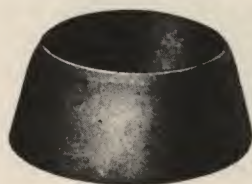


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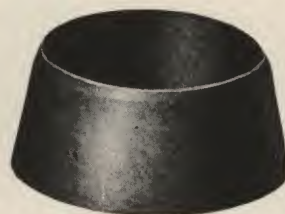


Waste Washers

A waste washer of poor material or incorrectly molded is useless to a plumber. The two important things are a perfect fit and an extra fine quality of rubber. You can depend upon this line being just right.



No. 380



No. 381



No. 382

Ideal Waste Washers—Light

No.	Size
380	1 in.
381	1 1/4 in.
382	1 1/2 in.



No. 385



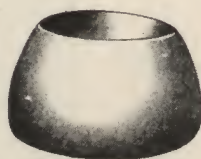
No. 386



No. 387

Ideal Waste Washers—Heavy Packed 12 per Carton

No.	Size
385	1 in.
386	1 1/4 in.
387	1 1/2 in.



No. 390



No. 391



No. 392

Model Waste Washers

No.	Size
390	1 in.
391	1 1/4 in.
392	1 1/2 in.



Woodward Wanger Co.



Waste Washers



Waste Washers

No.	Size
395	1 in.
396	1 1/4 in.
397	1 1/2 in.
398	1 3/8 in.



Waste Washers

No.	Size
400	Basin
401	Bath



Waste Washers—Electric

No.	Size
410	Basin
411	Bath

Brass Mounted Waste Washers

REGULAR STYLE

No.	Size	Tapped
420	Basin	1 in. F.T.
421	Bath	1 1/2 in. F.T.



Wolff Waste Washers

No.	Size
413	Basin



Wolff Waste Washers

No.	Size
414	Bath



Woodward Wanger Co.



Closet and Basin Connections



No. 430

Dandy Closet Connection
Packed 12 per Carton

No.	Size
430	1 1/4 in.



Nos. 443-444

Ohliger Basin Connection
Packed 12 per Carton

No.	Size
443	1 1/4 in.
444	1 1/2 in.

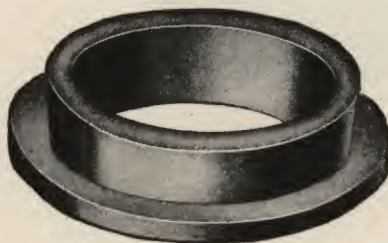
Closet Spud Washers



Plain Cut

Packed 12 per Carton

No.	Size	Inside Diameter	Outside Diameter	Height
467	2 in.	2 in.	2 3/8 in.	3/4 in.



Closet Spud Washers—Flanged

Packed 12 per Carton

No.	Size	Inside Diameter at Top	Inside Diameter at Base	Outside Diameter of Flange
470...	1 1/4 in.	1 7/8 in.	1 5/8 in.	2 1/2 in.
471...	1 1/2 in.	1 15/8 in.	1 7/8 in.	2 3/4 in.
472...	2 in.	2 3/8 in.	2 1/4 in.	3 1/4 in.
473...	Special	2 7/8 in.	2 1/8 in.	3 in.



Closet Spud Washers—Beveled

Packed 12 per Carton

No.	Size	Inside Diameter	Outside Diameter	Height
478....	1 1/4 in.	1 7/8 in.	2 3/8 in.	7/8 in.
479....	2 in.	2 1/4 in.	3 1/8 in.	7/8 in.



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Closet Floor Flange Gaskets



No. 483

Rubber

No.	Size Inside Diameter	Size Outside Diameter
483	4 1/4 in.	7 in.



Nos. 486-487

Asbestos

No.	Size Inside Diameter	Size Outside Diameter
486	3 1/4 in.	4 1/2 in.
487	4 in.	5 in.

Sponge Rubber Floor Gaskets

Made of High-Grade Sponge Rubber



No.	O.D.	I.D.	THICK
No. 504....	5 3/8"	3 1/2"	9/16"
No. 505....	5 3/8"	3 1/2"	3/4"



Flush Valve Washer—Rubber



Nos. 490-491



492

This washer, made from high quality rubber, is much superior to the ordinary flat washer for use in installing Flush Valves in Closet Tanks, especially in the case of Vitreous China Tanks, which frequently do not have an even surface to receive the Flush Valve.

By the use of this washer a tight joint can be made without loss of time. This style washer is regularly furnished with our Ball Flush Valves Nos. 3293 and 3295, for Low Tank.

No.	Size Inside Diameter	Size Outside Diameter	For use with Valve for
490.....	1 7/8 in.	2 3/8 in.	High Tank
491.....	2 1/4 in.	3 1/8 in.	Low Tank
492.....	2 1/4 in.	3 1/2 in.	Low Tank



Woodward Wanger Co.



Testing Plug Rings

Testing Plug Rings

Made of a good grade of rubber, very resilient and guaranteed not to crack.

No.	Size
510	2 in.
511	3 in.
512	4 in.
513	5 in.
514	6 in.



Nos. 510-514

Syphon Valve Washers (FEATHER EDGE STYLE)



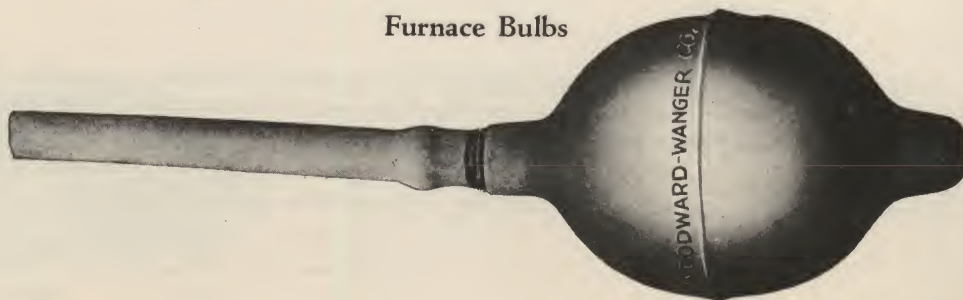
WILL SEAT
PERFECTLY

CAREFULLY
PACKED

Nos. 585-591
PACKED 12 PER CARTON

No.	Size
585	1 1/8 in.
586	1 1/4 in.
587	1 3/8 in.
588	1 1/2 in.
589	1 5/8 in.
590	1 3/4 in.
591	2 in.

Furnace Bulbs



No.	Diameter
450	2 in.
451	2 1/4 in.



Woodward Wanger Co.



Gauge Glass Washers



Gauge Glass Washers—Square
• LIGHT •

No.	Inside Diameter	Outside Diameter	Height
532	$\frac{9}{16}$ in.	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.
533	$\frac{11}{16}$ in.	1 in.	$\frac{1}{4}$ in.

Gauge Glass Washers—Square
• HEAVY •

No.	Inside Diameter	Outside Diameter	Height
535	$\frac{7}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.
536	$\frac{9}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.
537	$\frac{11}{8}$ in.	$1\frac{1}{8}$ in.	$\frac{1}{4}$ in.



Gauge Glass Washers—Round
Packed 100 Per Carton

No.	Size
540	$\frac{1}{2}$ in.
541	$\frac{5}{8}$ in.
542	$\frac{3}{4}$ in.



Royle Hose Connection Washers

Packed 12 Per Carton

No.	Size
552	For $\frac{1}{2}$ in. Faucets
553	For $\frac{5}{8}$ in. Faucets



Low Pressure Diaphragms

Made of a good grade of rubber

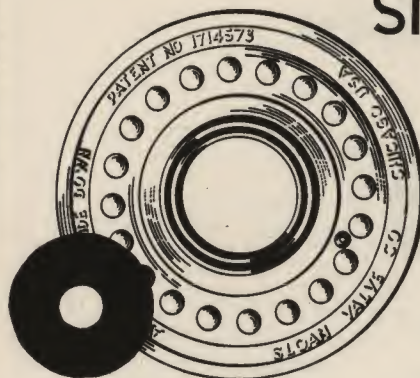
No.	Size
570	6 in.
571	7 in.
572	8 in.
573	9 in.



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Sloan Valve Repairs FOR IMPROVED ROYAL

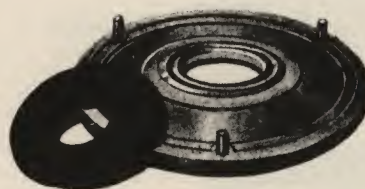


No. 565-S
(As Illustrated)

A monel Metal by-pass is built into each Segment Diaphragm, eliminating Dowel Pins and By-Pass tube, and making the replacement of the present diaphragm a single matter. No other feature of the valve is altered and the change is made quickly and inexpensively.

No. 565-S—Set of two pieces (as illustrated) consisting of one Segment Diaphragm, and one Relief Valve Seat.

REPAIR PARTS FOR FORMER ROYAL (old style Diaphragm)



The demand mostly, is for a set of two pieces, the plain diaphragm (without dowels) and the Relief Valve Seat. The reason for this is because the other two parts can be in most cases used over again.

ORDER BY NUMBER

No. 565—Plain Diaphragm and Relief Valve Seat
(no By-Pass tubes or dowels)

No. 567—By-Pass Tube

No. 568—Dowel

Improved ROYAL with Segment Diaphragm

IMPROVED ROYAL VALVE

A-4	Outside Cover
A-11	Inside Cover
A-13A	Guide
A-15A	Disc Complete
A-17	Relief Valve Seat
A-19A	Relief Valve
A-56A	Segment Diaphragm

IMPROVED ROYAL OUTLET

F-2A	1½" Outlet Coupling Assem.
F-2A	1½"x1¼" Outlet Coupling Assem.
F-3	1½" Friction Ring
F-5	1½" S. J. Rubber
F-101	1¼" or 1½"x5½" Outlet

IMPROVED ROYAL HANDLE

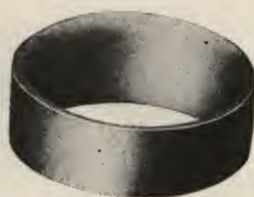
B-1A	China Handle Assembled
B-2	China Grip
B-3A	Handle Shank
B-5	Handle Bushing
B-8A	Handle Plunger
B-10	Handle Spring
B-11	Handle Packing
B-13	Handle Packing Nut
B-32A	Metal Handle Assembled
B-32	Metal Handle and Shank
A-6	Handle Coupling
A-31	Handle Gasket



Woodward Wanger Co.



Closet Tank Washers



C. & D. Tank Valve Washers
Packed 12 Per Carton

No.	Size
700	1 in.
701	1 1/4 in.
702	1 1/2 in.



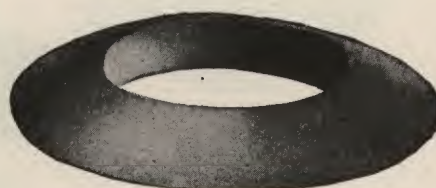
C. & D. Double-Seat Cushion Tank Washer
Packed 12 Per Carton

No.	Size
703	1 3/8 in.
704	1 5/8 in.

Half-Round Tank Washers
For Budde and McShane Tanks, Etc.

Packed 12 Per Carton

No.	Size
612	1 in.
613	1 1/4 in.
614	1 1/2 in.



Nos. 612-614

Plunger Rings—Soft Pure Gum

Packed 12 Per Carton



	Size Inside Diameter	Size Outside Diameter
624	1 1/4 in.	2 1/4 in.
625	1 1/2 in.	2 3/4 in.
626	1 3/4 in.	2 7/8 in.



Woodward Wanger Co.

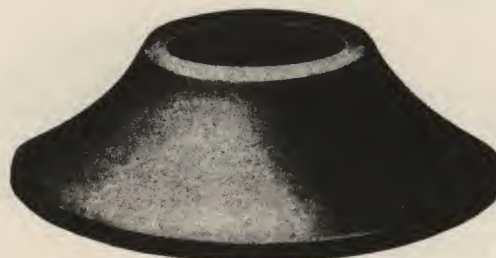


Closet Tank Washers



Syphon Packers
FOR WOLFF TANKS, ETC.

No.	Size Inside Diameter	Size Outside Diameter
655	1 ¹ / ₄ in.	2 ¹ / ₄ in.
656	1 ⁷ / ₈ in.	3 ¹ / ₄ in.
657	2 ¹ / ₈ in.	3 ³ / ₈ in.



No. 660

Tank Packings
Extra Quality Rubber
For Monarch and Gravity Tanks, etc.
Packed 6 Per Carton

No.	Size
660	1 x 2 ¹ / ₂ x ³ / ₄ in.



Flat Tank Washers
With Large Hole
For Enterprise, Hogan, Standard Valves, Etc.

Packed 12 Per Carton

No.	Inside Diameter	Outside Diameter	Thickness
667	1 ¹ / ₈ in.	2 ³ / ₈ in.	¹ / ₈ in.
668	1 ¹ / ₄ in.	1 ³ / ₄ in.	¹ / ₈ in.
669	1 ¹ / ₄ in.	2 ³ / ₈ in.	¹ / ₈ in.
670	1 ¹ / ₄ in.	2 ¹ / ₂ in.	¹ / ₈ in.
671	1 ⁷ / ₈ in.	2 ³ / ₈ in.	¹ / ₈ in.
672	1 ⁷ / ₈ in.	2 ³ / ₄ in.	¹ / ₈ in.
673	1 ¹ / ₂ in.	2 ⁷ / ₈ in.	¹ / ₈ in.
674	1 ¹ / ₈ in.	3 in.	¹ / ₈ in.

ORDER BY NUMBER



Woodward Wanger Co.



Tank Cups



Tank Cup—Gold Medal
Packed 12 Per Carton

No. 747 Diameter 2 $\frac{1}{8}$ in. Height $\frac{3}{4}$ in.



Tank Cup—H. J. & C.
Packed 12 Per Carton

No. 748 Diameter 2 $\frac{1}{8}$ in. Height $\frac{5}{8}$ in.

Tank Ball
FOR YOUNG FLUSH VALVE



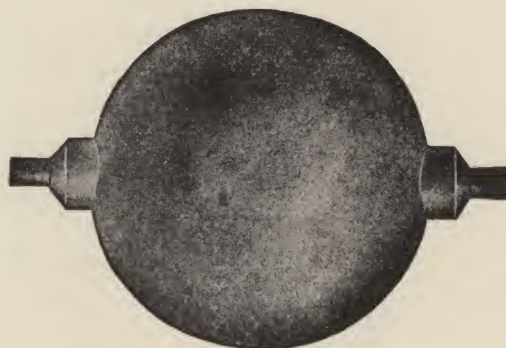
No. 758

Perfectly Round Hollow Ball
Packed 12 Per Carton

Made of a very high-grade rubber, with a heavy wall, assuring a perfect seat.

No. 758 Size 2 $\frac{1}{2}$ in.

Tank Ball
FOR COLUMBUS TANKS



No. 768

Packed 12 Per Carton

No. 768 Size 1 $\frac{1}{2}$ in. Diam.

Flat Plunger



No. 1332 Rubber 4" O. D. x $\frac{3}{4}$ " Thick
1333 Cloth Inserted 4" O. D. x $\frac{3}{8}$ " Thick

Steam Specialties & Chemical Goods

Iron & Steel Pipes
Closet Tank Fittings

Small Brass Accessories



Woodward Wanger Co.



Bumpers



Nos. 812-813



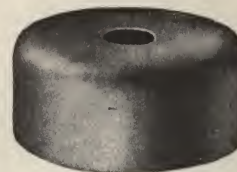
No. 814



No. 815



No. 816



No. 817

Plain Bumpers WITH RECESS FOR SCREW

No.	Size	No.	Size
812	$\frac{1}{2}$ in.	815	$\frac{1}{2}$ in.
813	$\frac{3}{8}$ in.	816	1 in.
814	$\frac{3}{4}$ in.	817 (For Tack)	$1\frac{1}{4}$ in.

Tack Bumpers—White Packed 100 per Carton



Nos.
840



Nos.
841



Nos.
842



Nos.
843



Nos.
844

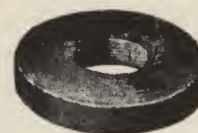
No.	Size	No.	Size
840	$\frac{3}{8}$ in.	843	$\frac{3}{4}$ in.
841	$\frac{1}{2}$ in.	844	$\frac{7}{8}$ in.
842	$\frac{5}{8}$ in.		



No. 847

Closet Seat Bolt Bumpers

No.	Shape
847	Half Round
848	Flat



No. 848



No. 845

Pipe Strap Bumpers

No. 845 . . $\frac{5}{8}$ in. Diam. x $\frac{1}{2}$ in. High



Nos. 825-826

Flat Top Round Seat Bumper

No. 825—White Round Bumper, 1" diameter, $1\frac{1}{2}$ " high, $\frac{3}{8}$ " tack.

No. 826—Same in Black.

Slotted Screw Bumpers



Nos. 800-802

No.	Size
800	$\frac{3}{4}$ in.
801	$\frac{7}{8}$ in.
802	1 in.



Woodward Wanger Co.



Bumpers



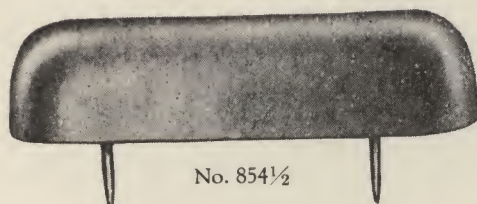
Nos. 850



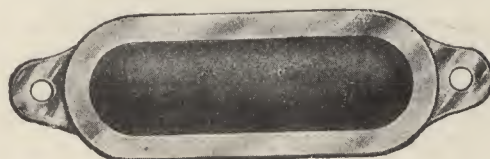
Nos. -852



No. 854



No. 854 1/2



No. 855

Oblong Seat Bumpers—Flat Top

COMPLETE WITH BRASS TACKS

No.	Color	Length	Height	Width
850	White	1 5/8 in.	3/8 in.	1/2 in.
852	White	2 1/8 in.	3/8 in.	1/2 in.

Oblong Seat Bumpers—Oval Top

COMPLETE WITH BRASS SCREWS

Packed 50 per Carton

No.	Color	Length	Height	Width
854	White	2 1/2 in.	1/2 in.	1/2 in.

Oblong Tack Bumper—White

Flat Top—Oval Sides and Rounded Ends

No.	Color	Length	Height	Width
854 1/2	White	2 1/2"	7/16"	1/8"
854 3/4	—Same in Black.			

Oblong Seat Bumpers—Oval Top

WITH N. P. METAL HOLDERS

Complete with N. P. Brass Tacks

Packed 50 per Carton

No.	Color	Length	Height	Width
855	Gray	2 1/2 in.	1 1/8"	1/2 in.

SEAT BUMPER ASSORTMENTS

In Strong Protective Tin Cans

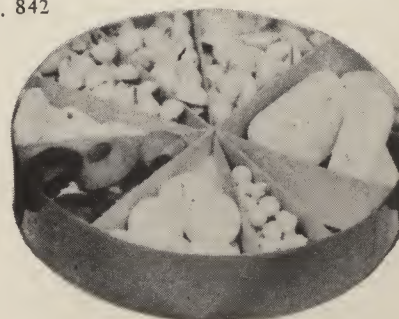
No. 797—12 of No. 854 1/2 and 12 of No. 842



No. 797

No. 798—122 Assorted Bumpers

24—No. 840	6—No. 847
25—No. 841	6—No. 850
25—No. 842	6—No. 854 1/2
24—No. 843	6—No. 825



No. 798



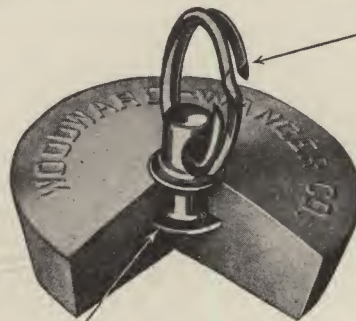
Woodward Wanger Co.



Solid Rubber Stoppers



HIGHEST QUALITY SOLID RUBBER



SPLIT RING

THE SAME AS
A KEY RING
WILL NEVER
PULL LOOSE



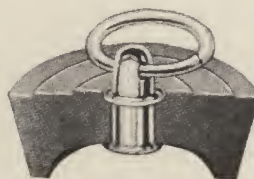
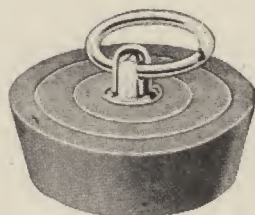
Each Stopper is packed in an individual box

WIDE ANCHOR ON RING POST
PREVENTS PULLING OUT

Packed 12 per Carton

ORDER BY NUMBER

No.	Size	No.	Size
857	1 in.	861	1 1/2 in.
858	1 1/8 in.	862	1 7/8 in.
859	1 1/4 in.	863	1 3/4 in.
860	1 3/8 in.	864	2 in.
865	1 7/8 in.		



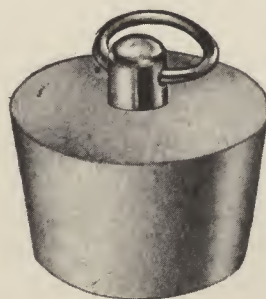
CONCAVE RUBBER STOPPER

With Split Single Ring

ORDER BY NUMBER

No.	Size	No.	Size
857-C	1 in.	861-C	1 1/2 in.
858-C	1 1/8 in.	862-C	1 7/8 in.
859-C	1 1/4 in.	863-C	1 3/4 in.
860-C	1 3/8 in.	864-C	2 in.

"EXTRA HEAVY SOLID STYLE"



No.	Size	Diam. Bottom	Diam. Top
875	1 1/2"	1 3/8"	1 5/8"
876	2"	1 15/16"	2 3/16"

889..... For Sink Diameter 5 in.

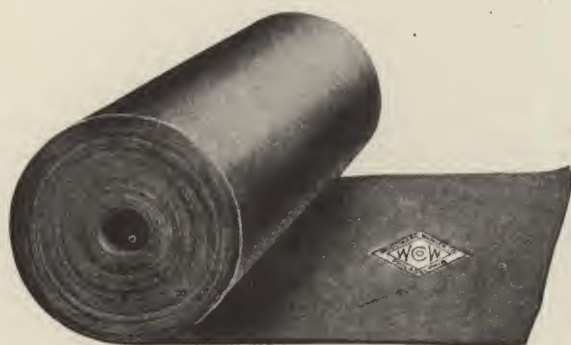


Woodward Wanger Co.



Rubber Sheet Packing

Our line of Rubber Sheet Packings has been carefully selected to meet the requirements of the plumbing and heating trade, and we offer only such grades as experience has shown to be best suited to the needs of the trade.



Nos. 900-902

Red Rubber Sheet Packing

WIDTH—36 IN.

Guaranteed to give satisfaction for all purposes for which this style of packing is generally used. It possesses great heat resistance, and being made from a base of Pure Para Rubber will keep in good usable condition for an indefinite time.

Sold in any length desired, but cut to the full width of the sheet.

ORDER BY NUMBER

No.	Thickness	Weight per Sq. Yd.
900 W-W Co. Red Rubber Sheet Packing...	$\frac{1}{8}$ in.	6 lbs.
901 W-W Co. Red Rubber Sheet Packing...	$\frac{3}{32}$ in.	9 lbs.
902 W-W Co. Red Rubber Sheet Packing...	$\frac{1}{8}$ in.	12 lbs.



No. 905

Pure Gum Sheet Packing

WIDTH—36 IN.

This is one of the best grades of pure rubber sheet; very useful for making certain special washers, which must be soft and flexible and give durable wear.

Sold in any length desired, but cut to the full width of the sheet.

ORDER BY NUMBER

No.	Thickness	Weight per Sq. Yd.
905 W-W Co. Pure Gum Sheet Packing.....	$\frac{1}{8}$ in.	10 lbs.

Cloth Inserted Sheet Packing



No. 908

W-W Co. Cloth Inserted Sheet Packing is of the highest grade and guaranteed to give lasting satisfaction. Width, 36 in. Sold in any length desired, cut to the full width of the sheet.

ORDER BY NUMBER

No.	Thickness	Weight per Sq. Yd.
908 W-W Co. C. I. Sheet Packing	$\frac{1}{8}$ in.	12 lbs.



Woodward Wanger Co.



High and Low Pressure Steam Packing

Compressed Asbestos Sheet Packing

Made from Canadian Asbestos fibre, scientifically blended with super heat resisting compounds. It is bonded under tremendous pressure, resulting in a pliable sheet with high tensile strength. Recommended for use against superheated or saturated steam, air, gas, ammonia and most chemical solutions.

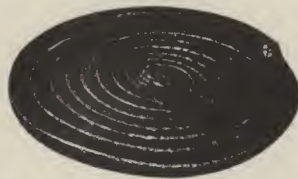
No.	Thick	Size	No.	Thick	Size	No.	Thick	Size
1626.....	1/32"	50"x50"	1627....	1/16"	50"x50"	1628.....	1/8"	50"x50"

Braided or Twisted Packing



Self Lubricating—Made from long fibre asbestos yarn, thoroughly lubricated with a heat resisting compound and graphite. Furnished braided or twisted. Recommended for use on stems of globe and angle valves operating against high pressure steam.

Twisted			Braided		
	No. 1629	No. 1630		No. 1635	No. 1636
1/8"	1 lb.	2 lb.	1/8"	1 lb.	2 lb.
	No. 1631	No. 1632		No. 1637	No. 1638
1/4"	1 lb.	2 lb.	1/4"	1 lb.	2 lb.
	No. 1633	No. 1634		No. 1639	No. 1640
3/8"	1 lb.	2 lb.	3/8"	1 lb.	2 lb.



Pump Packing

Made from long fibre Asbestos, braided square by the same method used in producing flax packing. Given a lubrication and graphite treatment which is impregnated into each strand of material. A high grade Centrifugal or Rotary Pump packing. Good against hot or cold water, caustic solutions and weak acids.

No.	Size	Length
1641.....	1/4"	115 ft.
1642.....	3/8"	108 ft.
1643.....	1/2"	63 ft.
1644.....	5/8"	44 1/4 ft.



Low Pressure Packing

Constructed of plies of closely woven duck, frictioned with a high grade rubber compound, and finished with thick rubber covers. Lubricated and graphited. Recommended for hot or cold water service, for steam service on piston and valve rods of engines and for steam piston rods of pumps at pressure of 100 pounds per square inch, or less.

All 12 1/2 ft. length	No. 1645.....	1/4"	No. 1648.....	5/8"
	No. 1646.....	3/8"	No. 1649.....	3/4"
	No. 1647.....	1/2"	No. 1650.....	1"



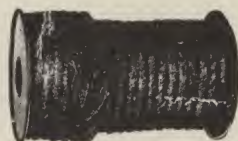
"Z" Spiral Packing

Constructed of diagonal plies of closely woven duck, frictioned with a specially compounded rubber. Unusual expansive quality. Recommended for use against medium pressure steam, hot water and ammonia, particularly on rods or plungers out of line or subject to a lateral motion.

All 12 1/2 ft. length

No. 1651...	1/4"	No. 1654...	5/8"
No. 1652..	3/8"	No. 1655...	3/4"
No. 1653...	1/2"	No. 1656...	1"

Asbestos Wick Packing



1169..	3/16"	68 ft.	1 lb.
1170..	3/16"	17 ft.	1/4 lb.
1171..	1/8"	110 ft.	1 lb.
1172..	1/8"	28 ft.	1/4 lb.

Candle Wicking



No.	Type
4720.....	Coarse
4721.....	Fine

Asbestos Wicking



No.	Weight
4724.....	1/4 lb.
4725.....	1/2 lb.



Woodward Wanger Co.



Leather Sheet Packing

Oak Tanned Leather

Fine Oak Tanned stock, especially selected for plumbers' use. In various sized pieces up to 12 x 20 ins.

No.

910.....Oak Tanned

Oil Tanned Leather

Selected stock carefully tanned in oil. A fine article for making special washers.

No.

911.....Oil Tanned



Nos. 910-911



No. 915

Leather Discs OAK TANNED

No.	Size	Thickness
915.....	2 1/4 in. O. D.	1/8 in.

Valve Discs For Jenkins Valves



HARD—WITH ROUND HOLE

No.	Size	O. D.	No.	Size	O. D.
925.....	1/4 in.	43/64 in.	929.....	1 in.	1 13/32 in.
926.....	3/8 in.	29/32 in.	930.....	1 1/4 in.	1 41/64 in.
927.....	1/2 in.	19/16 in.	931.....	1 1/2 in.	2 in.
928.....	3/4 in.	1 3/32 in.	932.....	2 in.	2 39/64 in.

No.	Size	O. D.	No.	Size	O. D.
933.....	1/4 in.	43/64 in.	937.....	1 in.	1 13/32 in.
934.....	3/8 in.	29/32 in.	938.....	1 1/4 in.	1 41/64 in.
935.....	1/2 in.	19/16 in.	939.....	1 1/2 in.	2 in.
936.....	3/4 in.	1 3/32 in.	940.....	2 in.	2 39/64 in.



HARD—WITH OBLONG HOLE

No.	Size	O. D.	No.	Size	O. D.
944.....	3/4 in.	1 3/32 in.	947.....	1 1/2 in.	2 in.
945.....	1 in.	1 13/32 in.	948.....	2 in.	2 39/64 in.
946.....	1 1/4 in.	1 41/64 in.			

No.	Size	O. D.	No.	Size	O. D.
952.....	3/4 in.	1 3/32 in.	955.....	1 1/2 in.	2 in.
953.....	1 in.	1 13/32 in.	956.....	2 in.	2 39/64 in.
954.....	1 1/4 in.	1 41/64 in.			



Woodward Wanger Co.



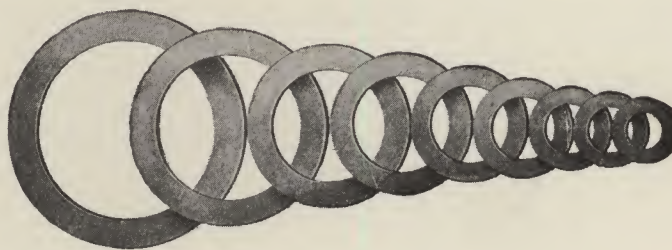
Flexo Union Washers



Nos. 992-999

No.	Size Union	Inside Diameter	Outside Diameter
992.....	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{13}{16}$ in.
993.....	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	1 in.
994.....	$\frac{1}{2}$ in.	$\frac{7}{8}$ in.	$1\frac{3}{8}$ in.
995.....	$\frac{3}{4}$ in.	$1\frac{1}{8}$ in.	$1\frac{7}{8}$ in.
996.....	1 in.	$1\frac{3}{4}$ in.	$1\frac{11}{8}$ in.
997.....	$1\frac{1}{4}$ in.	$1\frac{7}{8}$ in.	$2\frac{1}{8}$ in.
998.....	$1\frac{1}{2}$ in.	$1\frac{3}{4}$ in.	$2\frac{3}{8}$ in.
999.....	2 in.	$2\frac{3}{8}$ in.	$2\frac{1}{2}$ in.

Rubber Union Washers



Nos. 1017-1024

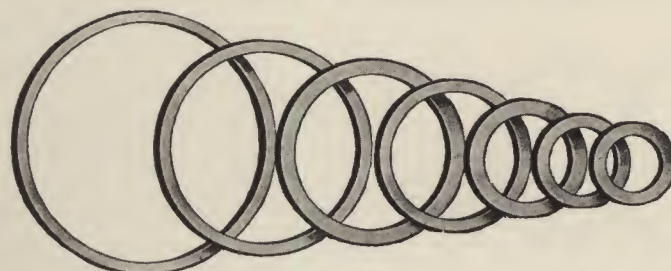
No.	Size Union	Inside Diameter	Outside Diameter
1017.....	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{7}{8}$ in.
1018.....	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.	1 in.
1019.....	$\frac{1}{2}$ in.	$\frac{3}{4}$ in.	$1\frac{1}{4}$ in.
1020.....	$\frac{3}{4}$ in.	$\frac{1}{2}$ in.	$1\frac{1}{2}$ in.
1021.....	1 in.	$1\frac{1}{8}$ in.	$1\frac{3}{4}$ in.
1022.....	$1\frac{1}{4}$ in.	$1\frac{7}{8}$ in.	$2\frac{1}{8}$ in.
1023.....	$1\frac{1}{2}$ in.	$1\frac{3}{4}$ in.	$2\frac{3}{8}$ in.
1024.....	2 in.	$2\frac{3}{8}$ in.	$2\frac{1}{2}$ in.



Woodward Wanger Co.



Rubber Slip-joint Washers



No.	To Slip Over	Size Enters Nut
1042.....	$\frac{1}{8}$ in. I. P.	$\frac{3}{8}$ in. I. P.
1043.....	$\frac{1}{8}$ in. I. P.	$\frac{1}{2}$ in. I. P.
1044.....	$\frac{1}{4}$ in. I. P.	$\frac{1}{2}$ in. I. P.
1045.....	$\frac{3}{8}$ in. I. P.	$\frac{3}{4}$ in. I. P.
1046.....	$\frac{3}{8}$ in. O. D. Tube	$\frac{3}{8}$ in. I. P.
1047.....	$\frac{3}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1048.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{3}{8}$ in. I. P.
1049.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1050.....	$\frac{1}{2}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1051.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1052.....	$\frac{7}{8}$ in. O. D. Tube	$\frac{3}{4}$ in. I. P.
1054.....	$\frac{3}{4}$ in. O. D. Tube	$\frac{3}{4}$ in. I. P.
1055.....	1 in. O. D. Tube	1 in. I. P.
*1056.....	$1\frac{1}{4}$ in. O. D. Tube (Thin)	See Note.
1057.....	$1\frac{1}{4}$ in. O. D. Tube (Reg.)	$\frac{1}{4}$ in. I. P.
1058.....	$1\frac{1}{4}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
1059.....	$1\frac{3}{8}$ in. O. D. Tube	$\frac{1}{4}$ in. I. P.
1060.....	$1\frac{3}{8}$ in. O. D. Tube	$\frac{1}{2}$ in. I. P.
*1061.....	$1\frac{1}{2}$ in. O. D. Tube (Thin)	See Note.
1062.....	$1\frac{1}{2}$ in. O. D. Tube (Reg.)	$\frac{1}{2}$ in. I. P.
1063.....	$1\frac{1}{2}$ in. O. D. Tube	2 in. I. P.
1064.....	2 in. O. D. Tube	2 in. I. P.

* Note.—Nos. 1056 and 1061 are used in making slip-joint connections at inlet of $1\frac{1}{4}$ and $1\frac{1}{2}$ in. Bent Tube Traps.

Beveled Slip-joint Washers



Nos. 1101-1108

No.	Hole	O. D. at Base	Height	Enters Nut Size
1101.....	$\frac{3}{8}$ in.	$\frac{37}{64}$ in.	$\frac{3}{16}$ in.	$\frac{3}{8}$ in. I. P.
1102.....	$\frac{7}{8}$ in.	$\frac{3}{16}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. P.
1103.....	$\frac{1}{2}$ in.	$\frac{3}{16}$ in.	$\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. P.
1103-S.....	$\frac{5}{8}$ in.	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	Used on W-W Compound Lever Ballcock
1104.....	$\frac{7}{8}$ in.	$\frac{7}{8}$ in.	$\frac{3}{8}$ in.	$\frac{3}{4}$ in. I. P. (See Note)
1105.....	$\frac{7}{8}$ in.	$\frac{7}{8}$ in.	$\frac{3}{16}$ in.	$\frac{3}{4}$ in. I. P. (See Note)
1107.....	$\frac{3}{8}$ in.	$\frac{5}{8}$ in.	$\frac{7}{8}$ in.	Basin Faucet Coupling Nut and $\frac{7}{8}$ in. Swedge Supplies and Handy Basin Supply
1108.....	$\frac{7}{8}$ in.	$\frac{3}{4}$ in.	$\frac{7}{8}$ in.	Ideal and Success Float Valve (Ball Cock) Coupling Nuts

Note.—Nos. 1104, 1105 and 1106 are also intended for use with Bath Faucet Couplings.

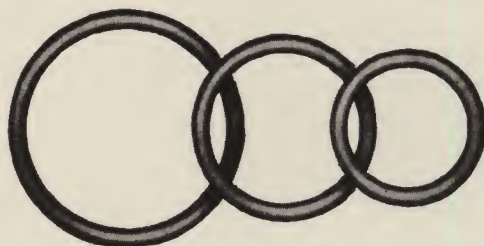


Woodward Wanger Co.



Round Slip-joint Washers

Packed 50 per Carton



Nos. 1110-1114

No.	Size To-Slip Over	Size Enters Nut
1110	$\frac{3}{8}$ or $\frac{1}{2}$ in. I. P. or Tube	$\frac{3}{8}$ or $\frac{1}{2}$ in. I. P.
1111	$\frac{1}{4}$ in. Tube (See Note)	$\frac{1}{4}$ in. I. P.
1112	$1\frac{3}{8}$ in. Tube	$1\frac{1}{2}$ in. I. P.
1113	$1\frac{1}{2}$ in. Tube	$1\frac{1}{2}$ in. I. P.
1114	2 in. Tube	2 in. I. P.

Note.—No. 1111 can be used for $1\frac{1}{4}$ in. or $1\frac{1}{2}$ in. Slip Nuts on Tubing Traps.

Tit Valves—Rubber



1118



1119



1120



1121



1122

No.	Size	No.	Size
1118	1	1121	4
1119	2	1122	5
1120	3		

Vents—Rubber



1132



1133



1134



1135

No.	Size	No.	Size
1132	1	1134	3
1133	2	1135	4

Bung Rings—Rubber



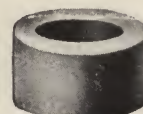
1145



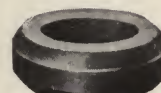
1146



1147



1148



1149

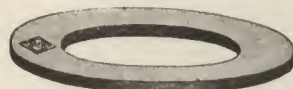
No.	Size	No.	Size
1145	1	1148	4
1146	2	1149	5
1147	3		



Woodward Wanger Co.



Washers and Packing

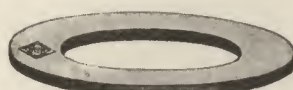


No. 1158

Basin Washers—Rubber

Thickness $\frac{1}{8}$ in.

No.	Size Inside Diameter	Size Outside Diameter
1158.....	$1\frac{1}{4}$ in.	$2\frac{1}{8}$ in.



No. 1163.

P. O. Plug Washers

Packed 50 per Carton

No.	Size Inside Diameter	Size Outside Diameter	Thickness	Made from
1163.....	$1\frac{1}{2}$ in.	2 in.	$\frac{1}{8}$ in.	Rubber



Nos. 1164—1165

Shank Washers for Sink Strainers

Packed 50 per Carton

For use with "W-W" Sink Strainers Nos. 4319 and 4320

No.	Size Inside Diameter	Size Outside Diameter	Thickness	Made from
1164.....	$1\frac{1}{8}$ in.	$2\frac{1}{8}$ in.	$\frac{1}{8}$ in.	Leather
1165.....	$1\frac{1}{8}$ in.	$2\frac{1}{8}$ in.	$\frac{1}{8}$ in.	Rubber



Nos. 1166—1167 $\frac{1}{2}$

Coupling Washers for Sink Strainers

Packed 50 per Carton

For use with "W-W" Sink Strainers Nos. 4319 and 4320

No.	Size Inside Diameter	Size Outside Diameter	Thickness	Made from
1166.....	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{32}$ in.	Rubber
1167.....	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{32}$ in.	Leather
1167 $\frac{1}{2}$...	$1\frac{1}{8}$ in.	$1\frac{3}{8}$ in.	$\frac{3}{32}$ in.	Fiber



1168-S
1168-M

C. I. Stem Packing (Graphite and Asbestos) Split

No.	Outside Diameter	Hole	Height
1168-S	$\frac{5}{8}$ "	$\frac{3}{8}$ "	$\frac{3}{16}$ "
1168-M	$\frac{1}{2}$ "	$\frac{3}{8}$ "	$\frac{1}{16}$ "

Either of these packings will shape themselves to fit the cap in which they are placed.

Stem Packing

Complete Sets



BASIN

No. 1180-S—Set of three O. D. $\frac{3}{4}$ "
Stem Packing for W-W No. 6664, No. 6655,
No. 6656.

No. 1181-S—Brass Washer Only
No. 1182-S—Fiber Washer Only
No. 1183-S—Graphite Packing Only

BATH

No. 1180—Set of three O. D. $\frac{1}{2}$ "
Stem Packing Set consists of one each, Brass
Washer, Fiber Washer, and Graphite Pack-
ing.

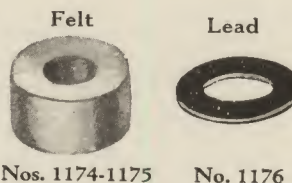
No. 1181—Brass Washer Only
No. 1182—Fibre Washer Only
No. 1183—Graphite Packing Only



Woodward-Wanger Co.



Fuller Eccentric, Corporation Cock, Gas and Water Meter Washers



Fuller Eccentric Washers—Felt

Packed 100 per Carton

No.	Outside Diameter	Height	Hole
1174	$\frac{3}{8}$ in.	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
1175	$\frac{3}{8}$ in.	$\frac{1}{8}$ in.	$\frac{3}{8}$ in.

Fuller Eccentric Washers—Lead

Packed 100 per Carton

No.	Outside Diameter	Hole	Thickness
1176	$\frac{3}{8}$ in.	$\frac{3}{8}$ in.	$\frac{3}{64}$ in.

Complete Sets

- 1177....Set of two Lead and one Felt Washer
No. 1174
1178....Set of two Lead and one Felt Washer
No. 1175

Corporation Cock Washers

Leather

- No. 1159for $\frac{1}{2}$ " Cock
No. 1160for $\frac{3}{8}$ " Cock
No. 1161 for $\frac{3}{4}$ " Cock



Sink Bolt Washers

Packed 100 per Carton



No.	Kind
1214	Leather

Mott Basin Washer

White Chrome Leather



No.	O. D.	I. D.	Thick
1215	$1\frac{1}{8}$ "	$\frac{3}{4}$ "	$\frac{3}{8}$ "

W-W Double Sink Faucet Coupling Washer

RED FIBER



No.	O. D.	I. D.	Thick
1211	$1\frac{1}{8}$ "	$\frac{3}{4}$ "	$\frac{3}{8}$ "

Water Meter Coupling Washer

Leather



No.	O. D.	I. D.	Thick
1212	$\frac{7}{8}$ "	$\frac{9}{16}$ "	$\frac{1}{8}$ "

Fiber

No.	O. D.	I. D.	Thick
1212	$\frac{1}{2}$ "	$1\frac{1}{16}$ "	$\frac{1}{16}$ "

Curtain Flush Valve Washer

Leather



No.	Diameter	hole	thick
1315	$2\frac{3}{8}$ "	$\frac{3}{8}$ "	$\frac{3}{32}$ "

Small Red Fiber Washers

For use in Waste Caps of Compression Stops and Wastes



No.	Size (O. D.)
1331	$\frac{3}{8}$ in.

Gas Heater Washers

RED FIBER



1209—Humphrey Heater
1" O. D., $2\frac{3}{32}$ " I. D.

1210— $1\frac{1}{8}$ " O. D., $1\frac{1}{16}$ " I. D. No. 1209

1242—Rex Heater Washer
 $2\frac{9}{32}$ " O. D., $1\frac{1}{16}$ " I. D.



Woodward Wanger Co.



Union Washers



No. 1230

Flexo Boiler Union Washers

Made from Cotton Fiber

No.	O. D.	I. D.	Thick.
1230	1 5/8"	1 1/8"	3/32"
1231	1 3/16"	7/8"	3/32"
1232	1 1/4"	7/8"	3/32"

Fuller Faucet Union Washers—

Red Fiber

Packed 100 per Carton

No.	Outside Diameter	Inside Diameter	Thickness
1235	1 1/8 in.	7/8 in.	1/16 in.
1236	1 3/16 in.	7/8 in.	1/16 in.



Nos. 1235-1236



Nos. 1240-1245

Soldering Union Washers—

Red Fiber

Packed 100 per Carton

No.	O. D.	I. D.	Fits I. P. Nut
1240	3/4"	3/8"	3/8"
1241	3/8"	1/8"	1/2"
*1242	3/8"	1/8"	3/4"
1243	1 3/16"	7/8"	1"

*Also used as a Rex Heater Washer.

Fiber Trap Washers

For Use With Bent Tube Traps

No.	Size of Trap	Outside Diameter	Inside Diameter	Thickness
1246	1 1/4 in.	1 1/2 in.	1 1/8 in.	1/16 in.
1247	1 1/2 in.	1 3/4 in.	1 1/2 in.	1/16 in.

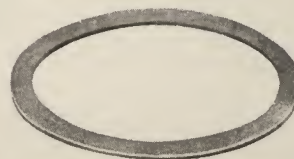


Nos. 1246-1249

Leather Trap Washers

For Use With Bent Tube Traps

No.	Size of Trap	Outside Diameter	Inside Diameter	Thickness
1248	1 1/4 in.	1 1/2 in.	1 1/8 in.	1/16 in.
1249	1 1/2 in.	1 3/4 in.	1 1/2 in.	1/16 in.



Steam Specialties & Chemical Goods

Closest Tank Fittings

Cast Brass - Faucets & Fittings
Small Brass Specialties



Woodward Wanger Co.



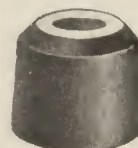
Float Valve (Ball Cock) Washers



Ideal
Nos. 1268-1269

Ideal Float Valve

No.	Kind
1268.....	Soft
1269.....	Hard



Success
Nos. 1274-1275

Success Float Valve

No.	Kind
1274.....	Soft
1275.....	Hard



Detroit
Nos. 1280-1281

Detroit Float Valve

No.	Kind
1280.....	Soft
1281.....	Hard

W-W COMPOUND LEVER



No. 1289
Rubber

Diameter $\frac{5}{8}$ in.
Thickness $\frac{1}{8}$ in.

W-W BALLCOCKS

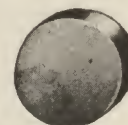
- Little Samson
- Kwyet
- Beaver



No. 1291
Rubber

Diameter $\frac{1}{2}$ in.
Thickness $\frac{1}{8}$ in.

DALE



No. 1295
Rubber

Diameter $\frac{1}{8}$ in.
Thickness $\frac{1}{8}$ in.

McSHANE



No. 1290
Rubber

Diameter $\frac{1}{8}$ in.
Thickness $\frac{1}{8}$ in.

DOUGLAS



Nos. 1292-1292A
Rubber

No.	Dia.	Thickness
1292	$\frac{9}{16}$ "	$\frac{1}{8}$ "
1292-A	$\frac{5}{8}$ "	$\frac{3}{4}$ "

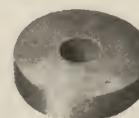
DOUGLASS PEERLESS



No. 1292-L
Leather

Diameter $\frac{5}{8}$ in.
Thickness $\frac{1}{8}$ in.

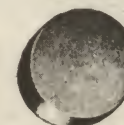
CURTAIN VALVE



No. 1314
Leather

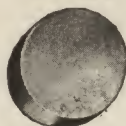
Diameter $\frac{5}{8}$ in.
Thickness $\frac{1}{8}$ in.

ROSS



No. 1313
Rubber
Diameter $\frac{3}{8}$ in.
Thickness $\frac{1}{8}$ in.

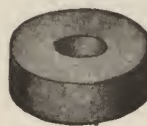
SUCCESS WOLFF



No. 1294
Rubber

Diameter $\frac{1}{8}$ in.
Thickness $\frac{1}{8}$ in.

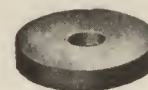
WOLFF



No. 1307
Felt

Diameter $\frac{1}{8}$ in.
Hole $\frac{1}{8}$ in.
Thickness $\frac{3}{8}$ in.

PITTSBURGH



No. 1301
Rubber

Diameter $\frac{1}{8}$ in.
Hole $\frac{1}{8}$ in.
Thickness $\frac{5}{8}$ in.

SPECIAL



No. 1302
Rubber

Diameter $\frac{1}{2}$ in.
Hole $\frac{1}{8}$ in.
Thickness $\frac{1}{8}$ in.



Woodward Wanger Co.



Float Valve (Ball Cock) Washers

STANDARD



Rubber

No.	O. D.	Hole	Thick.
1308	$\frac{31}{32}$ "	$\frac{5}{16}$ "	$\frac{1}{8}$ "
1309	$\frac{32}{32}$ "	$\frac{5}{16}$ "	$\frac{3}{32}$ "

STANDARD, JR.



No. 1303
Rubber

Diameter	$\frac{1}{8}$ in.
Hole	$\frac{1}{8}$ in.
Thickness	$\frac{1}{8}$ in.

STANDARD



No. 1306
Rubber

Diameter	$\frac{3}{8}$ in.
Length	$\frac{1}{4}$ in.

STANDARD MOTT - MADDOCK



Rubber

No.	Dia.	Thick.
1293	$\frac{5}{8}$ "	$\frac{1}{8}$ "
1293 1/2	$\frac{5}{8}$ "	$\frac{3}{32}$ "

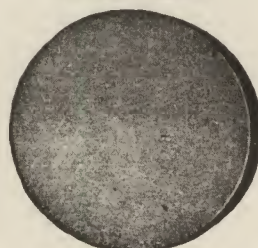
SPECIAL



No. 1304
Rubber

Diameter	$\frac{5}{8}$ in.
Hole	$\frac{3}{32}$ in.
Thickness	$\frac{1}{8}$ in.

COLUMBUS



No. 1296
Rubber

Diameter	$1\frac{1}{4}$ in.
Thickness	$\frac{1}{8}$ in.

MOTT



No. 1298

Leather

Diameter	$\frac{5}{8}$ in.
Thickness	$\frac{1}{8}$ in.

MANSFIELD SYLENTO



No. 1305
Rubber

Diameter	$\frac{5}{8}$ in.
Hole	$\frac{3}{32}$ in.
Thickness	$\frac{1}{8}$ in.

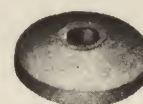
MANSFIELD SYLENTO BEVELED



No. 1311
Rubber

Diameter	$3\frac{1}{2}$ in.
----------	--------------------

BEVELED



No. 1312
Rubber

No.	Diameter
1310	$\frac{9}{16}$ in.
1311	$2\frac{1}{32}$ in.
1312	$\frac{3}{4}$ in.

DOUGLASS B. B.



No. 1300
Leather

Diameter	$\frac{5}{8}$ in.
Hole	$\frac{3}{32}$ in.
Thickness	$\frac{1}{8}$ in.

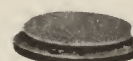
PARAGON



No. 1299
Rubber

Diameter	$1\frac{1}{2}$ in.
Thickness	$\frac{1}{8}$ in.

TRY-ME



No. 1299 1/2
Rubber

Top Diameter	$\frac{17}{32}$ "
Bottom Diameter	$\frac{3}{8}$ "
Thickness	$\frac{1}{8}$ "



Woodward Wanger Co.

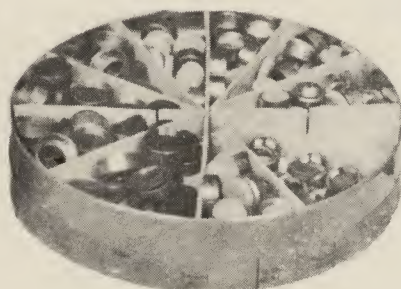


Float Valve (Ball Cock) Seat Caps and Washers



Complete—Brass Seat Cap with Washer to Fit

No.	Outside Diameter of Cap	Used With
3245.....	$\frac{39}{64}$ in.	Special
3246.....	$\frac{43}{64}$ in.	W-W. No. 3015-3047 and B. V. C.
3247.....	$\frac{43}{64}$ in.	Rose, Old Style Douglas, etc.
3248.....	$\frac{43}{64}$ in.	Hamilton, Gem, Peerless, etc.
3249.....	$\frac{47}{64}$ in.	"Try Me" and M. V. B. and Paragon
3250.....	$\frac{51}{64}$ in.	Success—McShane
3251.....	$\frac{51}{64}$ in.	Success—McShane
3252.....	$\frac{48}{64}$ in.	Coyne & Delaney
3253.....	$\frac{44}{64}$ in.	Hartford, Wolverine, Wolff & Success
3254.....	$\frac{39}{64}$ in.	for W-W Beaver and Little Samson
3264.....	$\frac{48}{64}$ in.	for W-W Compound Lever and Maddock
2995.....	$\frac{43}{64}$ in.	for W-W Kwyet Valve

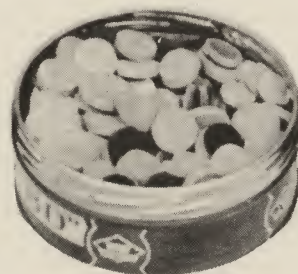


No. 3265

Seat Cap Assortment

No. 3265—100 Seat Caps (as selected) with Washers to fit.

No. 3266—100 Assorted Seat Caps only, as selected.



No. 1285

Ballcock Washer Assortment

No. 1285—10 each Ballcock Washers as follows:

No. 1290	No. 1294
No. 1291	No. 1295
No. 1292	No. 1292-L
No. 1293	No. 1298
No. 1293½	No. 1299



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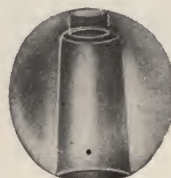
No. 1321
Prior Cushion



No. 1317
Standard Ball



No. 1320
Standard Cushion



No. 1316
Pierce Ball



No. 1318
Prior Ball



No. 1322
Model Cushion

Balls and Cushions

FOR SELF-CLOSING WORK

No.	Name	Outside Diameter	Hole	Length
1316	Pierce Ball	$\frac{7}{8}$ in.	$\frac{9}{32}$ in.	$\frac{3}{4}$ in.
1317	Standard Ball	$\frac{5}{8}$ in.	$\frac{3}{16}$ in.	$\frac{3}{4}$ in.
1318	Prior Ball	$\frac{5}{8}$ in.	$\frac{3}{16}$ in.	$\frac{3}{4}$ in.
1319	Model Ball	$\frac{5}{8}$ in.	$\frac{3}{16}$ in.	$\frac{3}{4}$ in.
1320	Standard Cushion	$\frac{3}{4}$ in.		

VOGEL CLOSET REPAIR SET



No. 1511-V
Set of four, one Hopper Valve Washer,
one $\frac{1}{2}$ " Special Fuller Ball and two
Fibre Washers.

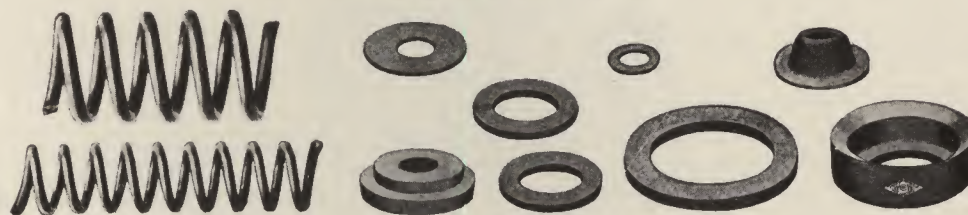
VOGEL PACKING



No. 1511-H
Vogel Hopper Valve Washer
O. D. $1\frac{1}{4}$ ", Hole $\frac{1}{2}$ "

Hopper Valve Washers

McCambridge and Furlow



Nos. 1498-1501

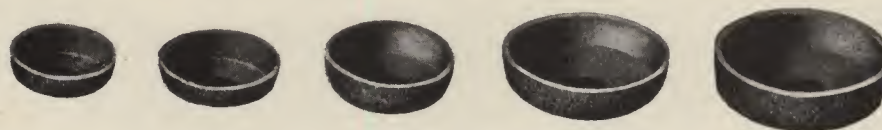
No.		
1498.....	McCambridge	Complete Sets, including Springs
1499.....	McCambridge	Complete Sets, less Springs
TS-1499.....	McCambridge	Top Spring, only
BS-1499.....	McCambridge	Bottom Spring, only
1500.....	Furlow	Complete Sets, including Springs
1501.....	Furlow	Complete Sets, less Springs
TS-1501.....	Furlow	Top Spring, only
BS-1501.....	Furlow	Bottom Spring, only



Woodward Wanger Co.



Leather Float Valve (Ball Cock) Cups



Nos. 1343-1356

No.	Outside Diameter	Hole	Height	Thick
1342.....	$\frac{1}{8}$ "	$\frac{1}{4}$ "	$\frac{3}{16}$ "	$\frac{1}{8}$ "
1343.....	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{3}{64}$ in.
1344.....	$\frac{7}{8}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1345.....	$\frac{1}{2}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1346.....	$\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{3}{64}$ in.
1347.....	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{3}{64}$ in.
1349.....	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.
1351.....	$\frac{7}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.
1353.....	1 in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1354.....	$1\frac{1}{8}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.
1356.....	$1\frac{1}{4}$ in.	$\frac{1}{4}$ in.	$\frac{1}{8}$ in.	$\frac{1}{8}$ in.

(No. 1349 for Mott Self-Closing Work)

Note.—No. 1345 is for use with Syento, Mansfield and Pittsburgh Float Valves (Ball Cocks).

(No. 1347 is also suitable for use in Torch and Furnace Pumps)

Assortment of Small Leather Cups

INCLUDES ALL IMPORTANT SIZES AND WILL TAKE CARE OF ALL
ORDINARY REQUIREMENTS



No. 1357

THIS BOX CONTAINS 60 CUPS—FIVE DIFFERENT SIZES

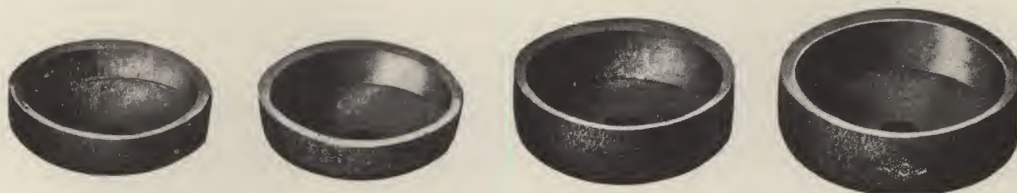
No.	Quantity
1357.....	60 Cups—Assorted



Woodward Wanger Co.



Motor and Air Pump Cups



HIGH GRADE OILED LEATHER

No.	Diameter
1358.....	$\frac{3}{4}$ in.
1359.....	1 in.
1360.....	$1\frac{1}{4}$ in.
1361.....	$1\frac{1}{2}$ in.
1362.....	$1\frac{3}{4}$ in.
1363.....	2 in.

Hose Washers

OVAL
Rubber



No. 1220 $\frac{1}{2}$ — $\frac{1}{2}$ "

ROUND
Rubber

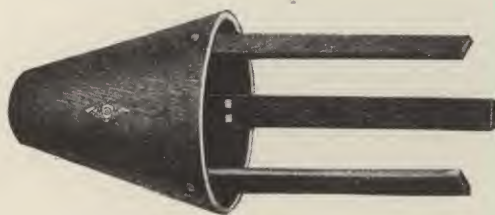


No. 1220— $\frac{1}{2}$ "

ROUND
Leather



No. 1225— $\frac{1}{2}$ "



Nos. 1468-1472

Boat Pump Plungers

LEATHER

Packed 12 per Carton

No.	Size
1468.....	2 in.
1469.....	$2\frac{1}{2}$ in.
1470.....	3 in.
1471.....	$3\frac{1}{2}$ in.
1472.....	4 in.



Woodward Wanger Co.



Pump Leathers



OAK TANNED

2½" for No. 1 Pump.
3" for No. 2 Pump.
3½" for No. 3 Pump.



OPEN BOTTOM

Number	1370	1372	1374	1376	1378	1379	1380	1382
Size	1¼"	1½"	1¾"	2"	2½"	2¾"	3"	3½"
Hole Size	¾"	⅝"	1⅛"	1¼"	1⅝"	1¾"	2"	2¼"

CLOSED BOTTOM

Number	SH-1371	SH-1372	SH-1374	SH-1376	SH-1378	SH-1379	SH-1380	SH-1382
Size	1⅝"	1½"	1¾"	2"	2½"	2¾"	3"	3½"



Nos. 1403-1427

Pump Valve Leathers—Lower



Nos. 1437-1458

Pump Plunger Leathers—Upper

OIL TANNED

No.	For Pump No.	Outside Diameter
1406.....	1	3 in.
1407.....		3¼ in.
1408.....	2	3½ in.
1409.....		3¾ in.
1410.....	3	4 in.

OAK TANNED

No.	For Pump No.	Outside Diameter
1421.....	1	3 in.
1422.....		3¼ in.
1423.....	2	3½ in.
1424.....		3¾ in.
1425.....	3	4 in.

OIL TANNED

No.	For Pump No.	Outside Diameter	Inside Diameter
1437....		2½ in.	1 in.
1438....		2¾ in.	1⅛ in.
1439....	1	3 in.	1½ in.
1441....	2	3½ in.	1¾ in.

OAK TANNED

No.	For Pump No.	Outside Diameter	Inside Diameter
1451....		2¾ in.	1⅛ in.
1452....	1	3 in.	1½ in.
1454....	2	3½ in.	1¾ in.
1455....		3¾ in.	2¼ in.



Woodward Wanger Co.



Hydrant Washers

COMPLETE SETS

Murdock



Nos. 1519-1520

1519 ($\frac{3}{4}$ in.) Murdock
1520 (1 in.) Murdock

Total Eclipse



Nos. 1533-1534

No.
1533 ($\frac{3}{4}$ in.) Total Eclipse
1534 (1 in.) Total Eclipse

FOR FLOAT VALVE SHANKS



No. 3113-S



No. 1586



No. 1587

No.	Style	Size
1586.....	With Lip	$\frac{7}{8}$ " x $1\frac{1}{8}$ "
1587.....	Plain	$\frac{7}{8}$ " x $1\frac{1}{8}$ "
3113-S	Beveled	$1\frac{11}{16}$ " x $1\frac{15}{16}$ " x $\frac{3}{8}$ "

FOR FLOAT VALVE COUPLING NUT

Rubber

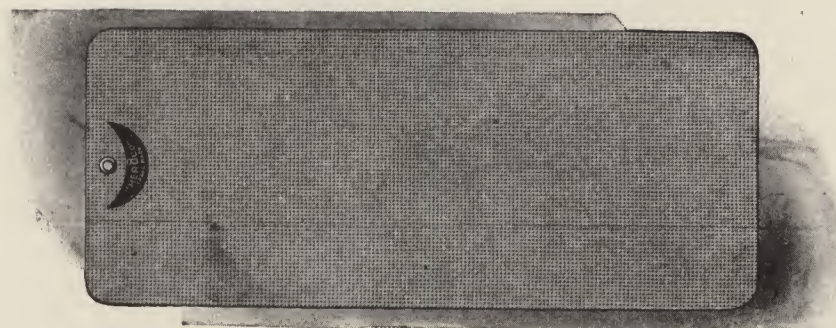


Number	1588	1589	1590	1591
Size	$\frac{7}{16}$ " x $\frac{3}{4}$ "	$\frac{1}{2}$ " x $\frac{13}{16}$ "	$\frac{1}{2}$ " x $\frac{7}{8}$ "	$\frac{3}{4}$ " x $\frac{13}{16}$ "

Leather

Number	1592	1593	1594	1595
Size	$\frac{7}{16}$ " x $\frac{3}{4}$ "	$\frac{1}{2}$ " x $\frac{13}{16}$ "	$\frac{1}{2}$ " x $\frac{7}{8}$ "	$\frac{3}{4}$ " x $\frac{13}{16}$ "

Rubber Mats



CORRUGATED WHITE RUBBER

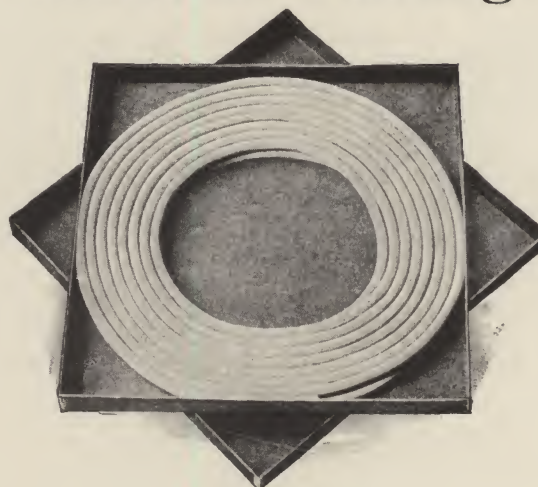
No.	Size
1600.....	12 x 30 in.
1601.....	12 x 36 in.
1602.....	15 x 30 in.
1603.....	15 x 36 in.
1604.....	15 x 42 in.



Woodward Wanger Co.



Rubber Tubing



White Rubber—

Packed in Boxes of 50 Feet Each

No.	Diameter	Wall	Weight	No.	Diameter	Wall	Weight
1547.....	3/8 in.	5/64 in.	Medium	1553.....	3/8 in.	6/64 in.	Heavy
1549.....	1/2 in.	6/64 in.	Medium	1555.....	1/2 in.	8/64 in.	Heavy

Red Cloth Inserted Tubing — Beer and Air Hose



Nos. 1576—1579

White rubber inside, red rubber outside.

No. 1576	3/8"	3 Ply	Beverage Hose
No. 1578	1/2"	3 Ply	Beverage Hose
No. 1579	1/2"	5 Ply	Beverage Hose

NICKEL PLATED CLAMPS

FOR RUBBER TUBING



No.	
1580	Nickel-plated

Rubber Tubing

PURE GUM TUBING

For Furnace Bulbs



This tubing is hand made of the finest rubber, very soft and pliable; is so constructed as to grip the connection at the furnace very firmly, thus preventing the annoyance of having the tube slip off the furnace while using the bulb.

This tubing is not corrugated.

1585.....	Pure Gum Tubing
-----------	-----------------



Woodward Wanger Co.



Junior

Plumbers' Friends



No. 1610

No. 1610—4" Diameter, 4" high, wide lip, Black Rubber with Clamp, no handle.

No. 1611—Same with 24" Cemented handle.



No. 1617

No. 1617—4" Cup, 4 1/2" high, Black Rubber, with Clamp, no handle.

No. 1618—Same with 24" Cemented handle.



Heavy 6" Cup, Extra Wide Lip

No. 1623—6" Heavy Duty Cup for Plumber's use. Black Rubber, Extra Wide Lip, with Clamp, no handle.

No. 1624—Same with 24" Cemented handle.

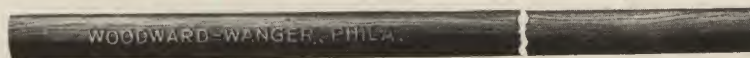


No. 1619

No. 1619—Heavy Model 4" Cup, 4 3/4" high, Gray Rubber, with Clamp, but no handle.

No. 1620—Same with 24" Cemented handle.

Hardwood Handles for Plumbers' Friends



SANDED AND VARNISHED

No.	Size
1625	1" x 24"



Woodward Wanger Co.



Master Carry-All Kits

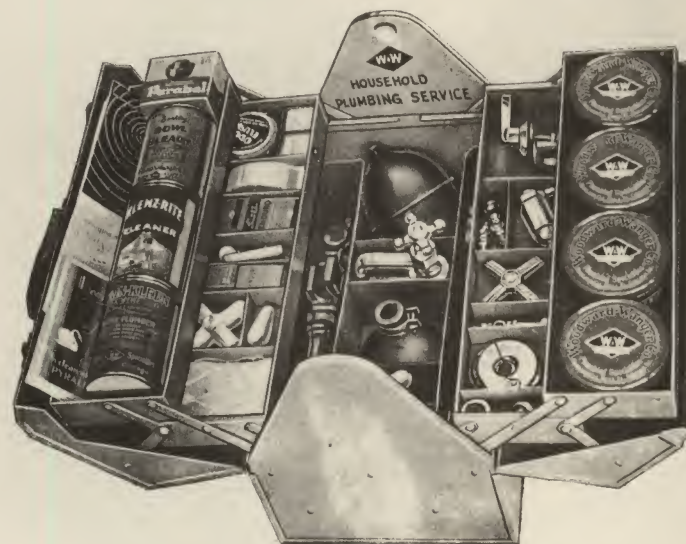
No. 1998-F

Plumber's Kit—Large Size

18" x 10" x 12½"

Pine Cone Outside finish, Green Enamel Inside finish. Complete with material.

No. 1998-E Kit without material.

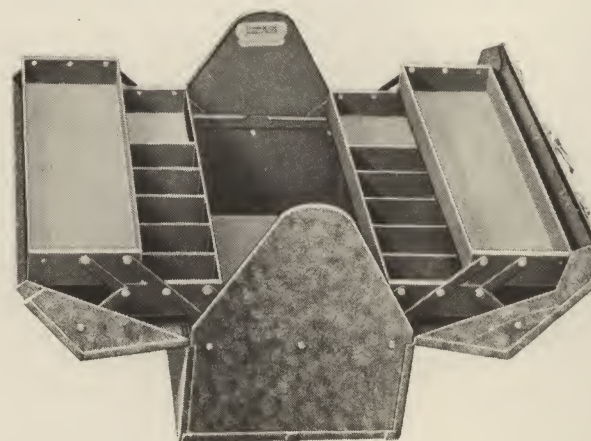


No. 1998-F

No. 1999-E

Plumber's Kit—Small Size

Empty—17" x 8" x 10". Pine Cone Outside finish. Green Enameled Inside finish.



No. 1999-E

Steam Specialties & Chemical Goods

Traps & Supply Pipes
Closet Tank Fittings

Small Brass Specialties



Woodward Wanger Co.



LITTLE Samson BALL COCK



IN this efficient, inexpensive ball cock, we offer the Master Plumber excellent value. Easy to rewasher, because it only has one lever pin, and the refill tube is set on the opposite side, and is not in the way.

Has full Water Way and a smooth, raised seat, and is well made throughout and is accurately machined. Has large copper hush tube, Shank is reamed to slip $\frac{3}{8}$ " supply, and it is equipped with coupling Nut, beveled slip joint washer and friction ring

Catalog Numbers and Description

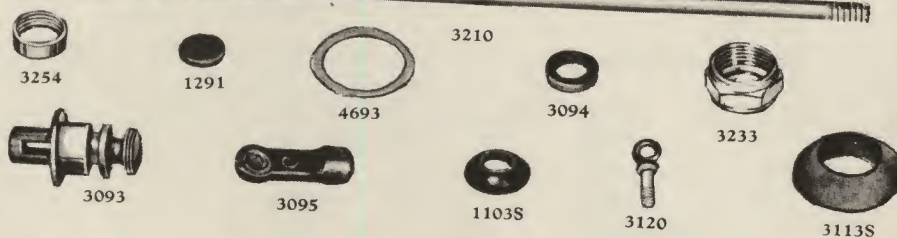
Regular Shank $1\frac{3}{4}$ " Reamed to slip $\frac{3}{8}$ " Supply

- No. 2950 Little Samson Elevated Pattern Ball Cock with Refill Tube.
No. 2951 As above with Float Rod and Refill Tube.
No. 2952 As above with Float Rod, Refill Tube and 4 x 5 Copper Float

Long Shank $2\frac{3}{4}$ " Reamed to Slip $\frac{3}{8}$ " Supply

- No. 2960 Elevated Pattern Ball Cock, with Refill Tube.
No. 2961 As above with Float Rod and Refill Tube.
No. 2962 As above with Float Rod, Refill Tube and 4 x 5 Copper Float

Repair Parts for W-W "Little Samson Ball Cock"



- No. 3210 Refill Tube
No. 3233 Coupling Nut
No. 4693 Friction Ring
No. 3113S Beveled Shank Washer

- No. 3093 Plunger
No. 3094 Split Leather Washer
No. 1291 Seat Cap Washer
No. 3254 Seat Cap

- No. 3120 Cast Eye Thumb Screw
No. 1103S Beveled Slip Joint Washer
No. 3095 Float Rod Lever.



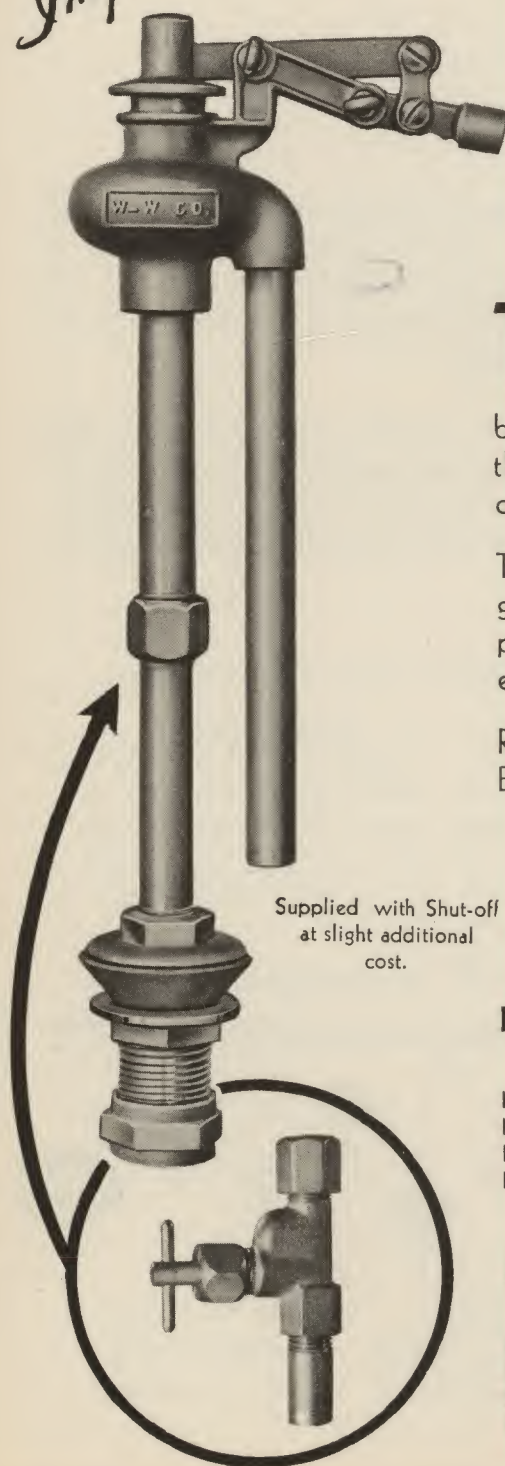
Woodward Wanger Co.



Improved Model

Compound Lever BALL COCK

Nos. 3037 to Nos. 3044



TO give satisfaction a Ball Cock must eliminate call-backs. It should be so constructed as to be usable in any Tank - high or low. It also should be adaptable to Tanks that have the hole close to the corner. This Valve is constructed with the Lever on one side to meet just such conditions.

The metal used in the casting of a Ball Cock is of great importance; High grade metal, such as we use, prevents the possibilities of sand holes, which also eliminates call-backs.

Read the 10 outstanding features found in this Ball Cock.

Catalog Numbers and Description

**Regular Shank $1\frac{3}{4}$ " Long
Reamed to slip $\frac{3}{8}$ " Supply.**

- No. 3037 Ball Cock with Refill Tube
- No. 3038 Ball Cock, Refill Tube and Rod
- No. 3039C Ball Cock Refill Tube, Rod and 4 x 5 Copper Float
- No. 3039 Ball Cock, Refill Tube, Rod and 4 x 5 Hard Rubber Float

**Long Shank $2\frac{3}{4}$ " Long
Reamed to slip $\frac{3}{8}$ " Supply.**

- No. 3042 Ball Cock with Refill Tube
- No. 3043 Ball Cock, Refill Tube and Rod
- No. 3044C Ball Cock, Refill Tube and Rod, and 4 x 4 Copper Float
- No. 3044 Ball Cock, Refill Tube and Rod and 4 x 5 Hard Rubber Float



Woodward Wanger Co.



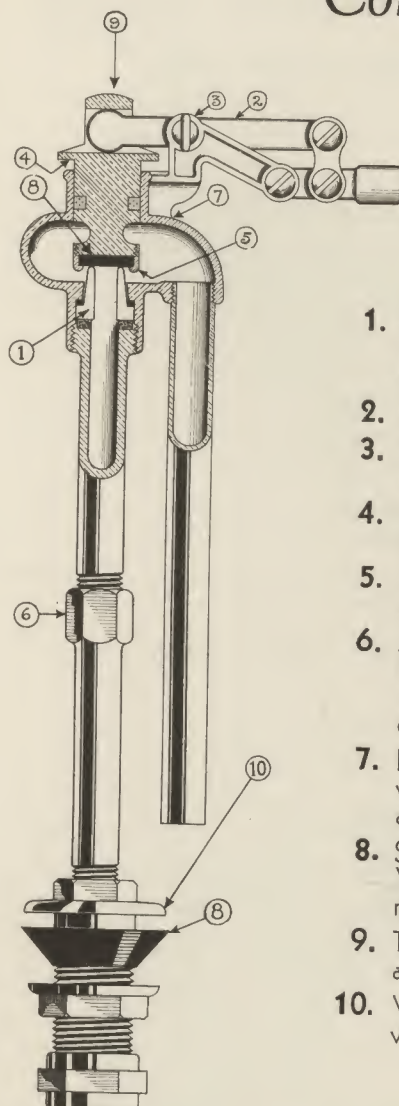
Compound Lever BALL COCK

Nos. 3037 — 3044

(See Opposite Page)

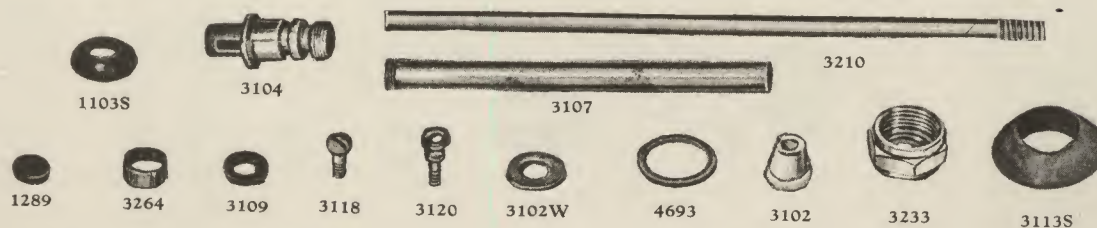
10

OUTSTANDING FEATURES



1. Has removable China Seat, very desirable for preventing the chemical reaction of certain waters. A China Seat is non-corrosive and cannot be scored.
2. Cross lever is made from cast brass to prevent wear and bending.
3. The removal of one Cast Brass Screw permits taking out Plunger or repairs.
4. Heavier Plunger with Wide Plunger Flange, preventing leaks through the top of the valve.
5. Chromium Plated Seat Cap with rounded edges to reduce any possibility of whistling.
6. Split Supply Tube with Hex Nut in the Middle. This permits lower half to be dispensed with, and upper section screwed right into the shank, and then, by cutting off the Hush Tube, ball cock can be used for High Tank Work.
7. Refill Tube tapping is placed in the rear of the body of the valve to prevent the possibility of breaking the refill when repairs are being made.
8. Seat Washer is soft, pliable, molded rubber washer. The Shank Washer is a heavy beveled washer. The washer in the coupling nut is a soft rubber slip joint washer with a heavy brass friction ring.
9. The machine work in this ballcock is clean and accurate so that all parts are properly fitted and smooth easy operation is assured.
10. We can furnish on special order a wide flange ($2\frac{1}{2}$ "), together with $2\frac{1}{2}$ " rubber washer for use on special tank.

Parts for W-W Compound Lever Ball Cock



No. 3102 China Seat
No. 3104 Plunger
No. 3118 Lever Set Screws
No. 4693 Brass Friction Ring

No. 1103S Beveled Slip Joint Washer
No. 1289 Seat Washer
No. 3102W Leather Washer for under China Seat

No. 3107 Hush Tube
No. 3109 Split Leather Washer
No. 3113S Beveled Shank Washer

No. 3120 Cast Eye Thumb Screw
No. 3210 Refill Tube
No. 3233 Coupling Nut
No. 3264 Seat Cap

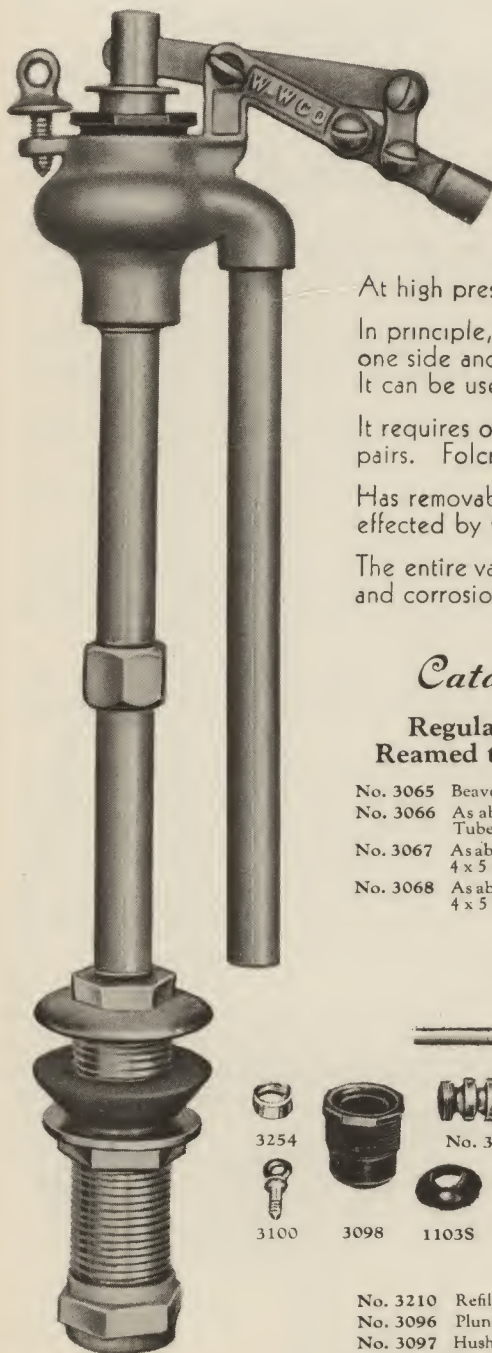


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THE "Beaver" BALL COCK

No. 3065 to No. 3072



Is reasonably quiet under any pressure, because you can reduce the volume of water by raising or lowering the volume regulator. This regulator is Hard Rubber, to prevent corrosion, or freezing in the body.

At high pressure it needs only standard 4 x 5 Float to function properly.

In principle, the valve is much like the Compound Lever. The lever is on one side and nothing projects beyond the vertical line of the ball cock. It can be used in a tank where the hole is close to the corner.

It requires only the removal of one screw to lift the Plunger out for repairs. Folcrum screw is Cast Bronze, a mark of quality.

Has removable China Seat, non-corrosive and cannot be scored. Not effected by the Chemical reaction of certain waters.

The entire valve, including refill Tube, is Cadmium Plated to resist rust and corrosion.

Catalog Numbers and Description

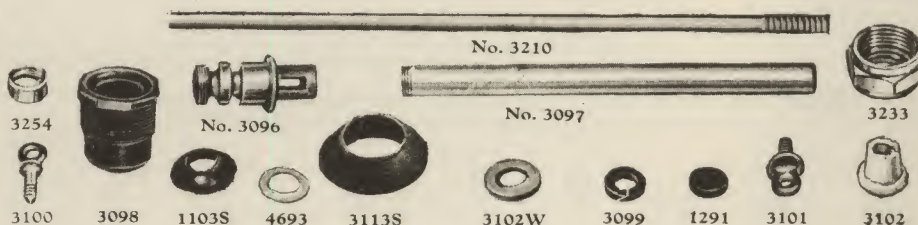
Regular Shank $1\frac{3}{4}$ " Reamed to slip $\frac{3}{8}$ " Supply

- No. 3065 Beaver Ball Cock with Refill Tube.
No. 3066 As above with Float Rod and Refill Tube.
No. 3067 As above with Float Rod, Refill and 4 x 5 Hard Rubber Float
No. 3068 As above with Float Rod, Refill and 4 x 5 Copper Float.

Long Shank $2\frac{3}{4}$ " Reamed to Slip $\frac{3}{8}$ " Supply

- No. 3069 Beaver Ball Cock, Long Shank with Refill Tube.
No. 3070 As above with Float Rod and Refill Tube.
No. 3071 As above with Float Rod, Refill and 4 x 5 Hard Rubber Float
No. 3072 As above with Float Rod, Refill and 4 x 5 Copper Float.

Parts for W-W "Beaver" Ball Cock



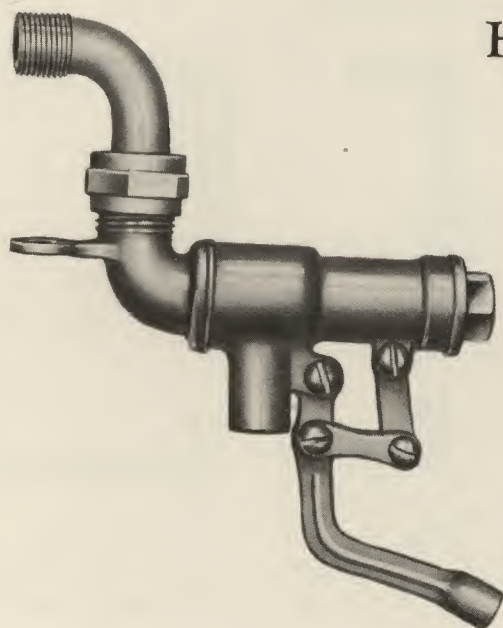
- No. 3210 Refill Tube
No. 3096 Plunger
No. 3097 Hush Tube
No. 3098 Hard Rubber Volume Regulator
No. 3102 China Seat
No. 3113S Beveled Shank Washer

- No. 3102W Leather Washer for China Seat
No. 3099 Split Leather Washer
No. 3254 Seat Cap
No. 1291 Seat Cap Washer

- No. 3100 Cast Eye Thumb Screw
No. 3101 Check Screw
No. 4693 Friction Ring
No. 1103S Slip Joint Washer
No. 3233 Coupling Nut



Woodward Wanger Co.



High Tank Top Supply Ball Cock

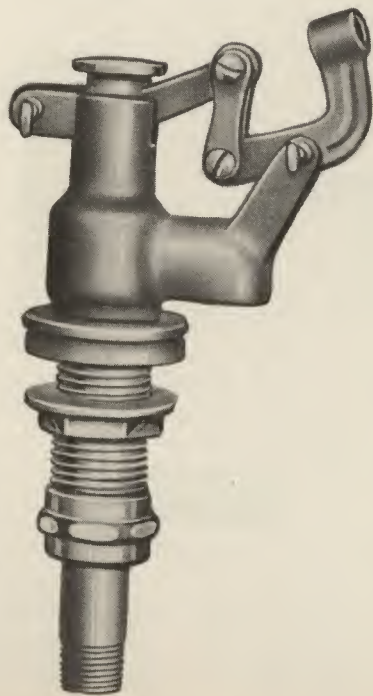
Catalog Number and Description

NO. 3045. This Ball Cock is designed for use in a high tank, with top supply. By the use of the wing elbow, the ball cock is entirely in the tank. Plunger is fully encased in the body to prevent leakage. Tapped $\frac{1}{4}$ -20 for float rod. The wing elbow is threaded $\frac{1}{2}$ " I. P. S., and is swiveled in the coupling nut to the wing elbow. The tail piece is threaded $\frac{3}{8}$ " I. P. S.

High Tank Top Supply Ball Cock

(not illustrated)

No. 3045 $\frac{1}{2}$ Same as above, but with a straight wing connection. This brings the tail elbow outside of the tank.



High Tank Bottom Supply Ball Cock

Catalog Number and Description

NO. 3085. This Ball Cock is designed for use in a high tank having a bottom supply. A special composition seat washer is held in place by a cadmium plated retaining cap. A cast $\frac{3}{8}$ " I. P. S. tail piece is regularly furnished. Lock nut, coupling nut and tail piece are highly polished and nickel plated.



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Ball Cock Parts



N. P. Couplings

No. 3225 1/2" I. P.
No. 3226 Ideal
No. 3227 3/4" I. P.



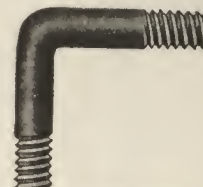
N. P. Couplings

No. 3221 1/2" I. P.
No. 3222 Ideal
No. 3223 Success
No. 3224 3/4" I. P.



Bronze Head

No. 3189 .. 3/4" .. 10-24



Bronze Head

No. 3190 .. 3/4" .. 10-24
No. 3191 .. 3/4" .. 11-24



Seat Caps

Sizes for all Ball Cocks
See Page 11



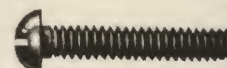
Ball Cock
Washers

All makes and sizes
See pages 46-47



Bronze Refill
Plug

No. 3228 1/4"
No. 3229 5/16"



No. 3192

Adjusting Screw
Bronze 7/8" 1/4-20
for Wolverine Ballcocks



No. 3120
Cast Eye Thumb Screw
1 1/8"-10-24



No. 3102
China Seat
All Valves



No. 3114
Bronze Float
Rod Lever

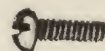


No. 3182
Brass Thumb Screw
for McShane Ball Cock
10-24



Bronze Link Screw

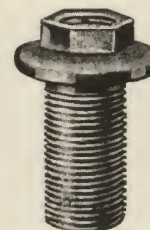
No. 3193 7/16" 10-24
No. 3194 1/2" 10-24
No. 3195 5/8" 10-24



L-3759
Bronze Ball Cock
Screw
1/2"-10-24



No. 3115
Bronze Plunger
Lever



No. 3105-D
Shank for Douglass
Ball Cock
This can be furnished in
place of any Shank

Float Rod Connections



No. 3204



No. 3205



No. 3206

No.

3204
3205
3206

Tapped Inside Threaded Outside

13/32 in. 1/4 in.
1/4 in. 13/32 in.
1/4 in. Double Female



Woodward Wanger Co.



Parts For Mansfield Float Valve (Ball Cock)



Catalog Numbers and Description

- | | | |
|--|--|---|
| 3150 Lever Screw | 3125 Brass Ring for Drilled Screw
in Cup or Seat Washer | 3152 Plunger with gland
(3151 and 3160) |
| 3160 Gland | 3158 Top Plunger Cap | 3166 Flat Rubber Shank Washer |
| 3162 Flat Leather Washer for Top
Plunger Cap | 3151 Plunger, Less Gland | 3167 Cast upright Lever complete |
| 3156 Drilled Screw for Use with
either Cup or Seat Washer | 3159 N. P. Coupling Nut Regular | 3168 Cast Horizontal Lever
complete |
| 1345 Leather Cup Washer | 1305 Flat Rubber Seat Washer | 3170 Perpendicular Lever with Set
Screw adjustment |
| 3171 High Tank Cast Lever Spud | 3169 Bent Rod Lever | |
| | 3172 Low Tank Cast Lever Spud | |



Pipe Holders

Adjustable Flush Pipe Holder

With Rubber Bumper

CAST BRASS—NICKEL PLATED

No.	To Slip O. D. Tube
4547.....	1 1/4 in.
4548.....	1 1/2 in.

Adjustable Supply Pipe Holder

CAST RINGS—NICKEL PLATED

4 in. Center to Back

FOR I. P. SIZE TUBING

No.	Size
4542.....	3/8 in.
4543.....	1/2 in.

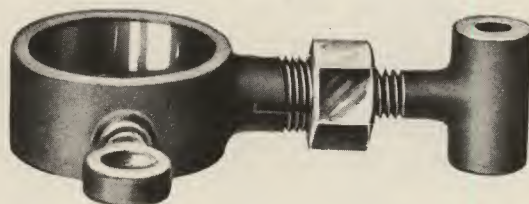




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Flush Valve Guides

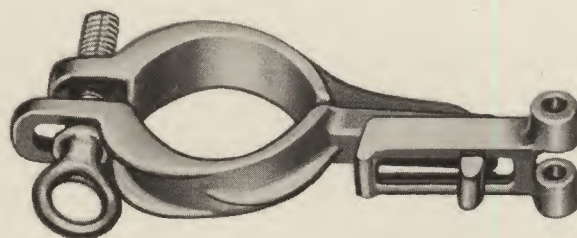
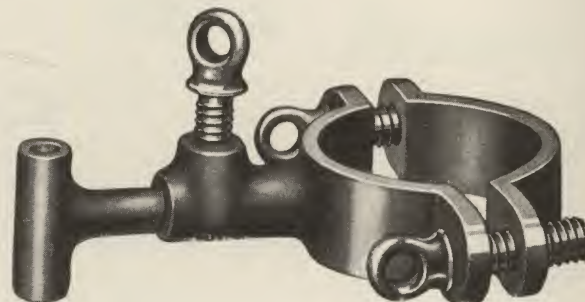


An adjustable guide, unfinished. Three sizes to fit different sized overflow tubes. Can be adjusted for length only.

No. 3333	1"
No. 3334	1 $\frac{1}{8}$ "
No. 3335	1 $\frac{1}{4}$ "

Split sleeve adjustment permits fitting the guide to any of the three popular overflow tubes — 1" — 1 $\frac{1}{8}$ ", or 1 $\frac{1}{4}$ ". It is also adjustable for length.

No. 3336 Chromium Plated



An all purpose Chromium Plated guide that will readily fit either 1", 1 $\frac{1}{8}$ " or 1 $\frac{1}{4}$ " tubes. Also adjustable for length and all adjustments are made tight with just one screw. Simple in construction, dependable in use.

No. 3337 Chromium Plated

Solid Type Guide

Made to fit one (1") inch Overflow Tube. Not adjustable for tube size or length.

No. 3338 Brass

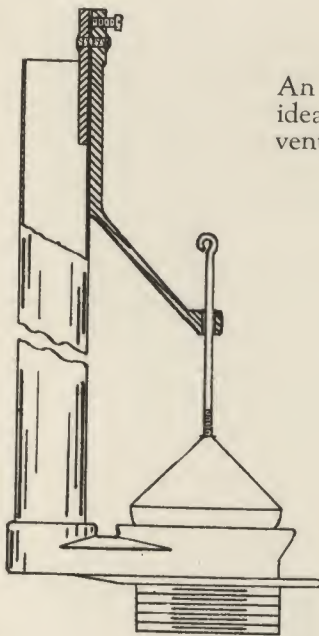




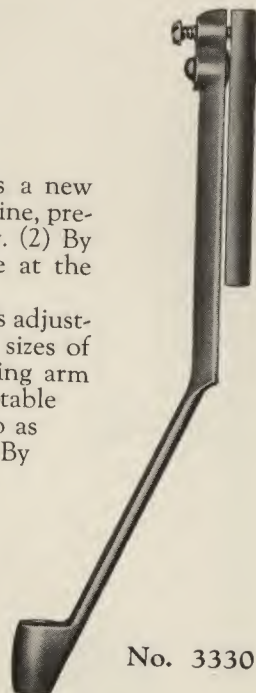
Woodward Wanger Co.



Flush Valve Guides



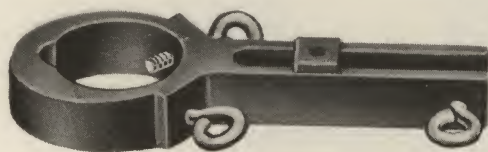
An adjustable Guide Arm that incorporates a new idea. (1) The set screw is above the water line, preventing rusting and wearing away of the screw. (2) By sliding over the edge of the tube at the top, it will fit all sizes of tubes. (3) By being made extra long, it is adjustable up and down so as to fit all sizes of lift rods. (4) By making the sloping arm of pliable material it is adjustable horizontally by means of pliers so as to fit all sizes of flushes. (5) By having the sloping arm long, it imparts a certain amount of vibration to the rod, thereby eliminating any sticking of the lift rod in the guide hole. (6) It saves time - is simple in construction and is inexpensive.



No. 3330

No. 3330 Guide Only. Fits any size Overflow tube. Adjustable by bending, which is easily done by hand or with pliers.

Hard Rubber Guide



No. 3340

This all-purpose guide can be quickly adjusted to fit either 1", 1½", or 1¾" tube. It is also adjustable for length, and, being made of hard rubber, it is practically indestructible.

No. 3340 Hard Rubber



No. 3346

Closet Pulls

No. 3346 Oak with Rubber Bumper N. P. Trimmings



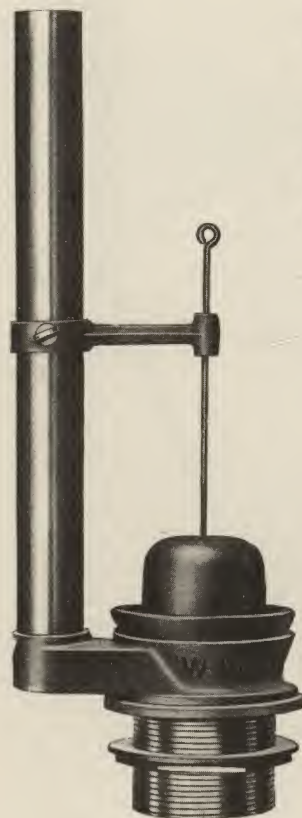
Woodward Wanger Co.



Flush Valves

THE Bodies of these valves are made from the very highest quality of metal, carefully machined and finished with deep, clean, accurate threads. The valve seats are beveled at the correct angle and smoothly finished. This assures perfect contact and easy seating for tank balls. The flush of all three valves is a full 2" which requires a 2½" tank ball, and Nos. 3293 and 3293-B are supplied this way.

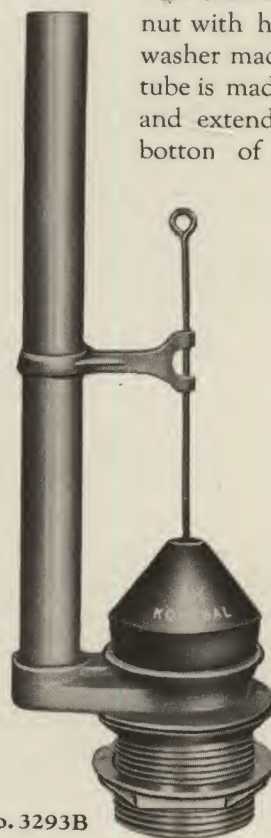
The Shank fittings consist of a substantial lock nut with hexagon, and improved flange shank washer made of the best rubber. The overflow tube is made of 20 gauge tubing and extends to 11½" from the bottom of tank to top of tube.



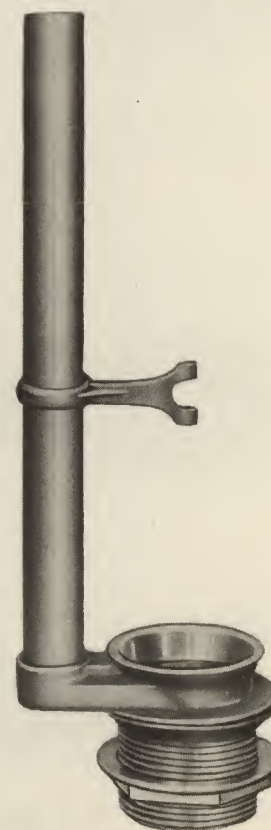
No. 3293

NOTICE

When purchasing No. 3293 you have the choice of either the Cushioned Mushroom Parabal, or the Heavv Duty Mushroom Parabal.



No. 3293B



No. 3294

Catalog Number and Description

- No. 3293 Flush Valve 2½" Complete with 2½" Mushroom Parabal, stem, lever wire and guide.
- No. 3293B Flush Valve 2½" Complete with 2½" Kone Bal, stem, lever wire and guide.
- No. 3294 Flush Valve 2½" with guide. No stem, ball or wire.



Woodward Wanger Co.



High Tank Valves

Catalog Number and Description



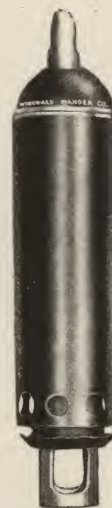
No. 3297

No. 3297. This Valve has 1 1/4" Flush, and requires a Flush Ball of 2" diameter. Comes fitted with 2" Mushroom Parabal, Coupling Nut, Stem and lever wires. No tail piece.

No. 3297-C. Complete as described above, but including a tail piece.

Cone Syphon Tank Valve — Brass Cone —

- No. 3299 - Size 1 1/4", Syphon Only, no Seat or Tail Piece
No. 3300 - Size 1 1/4", Syphon with Seat, no Tail Piece
No. 3301 - Size 1 1/4", Syphon with Seat, Tail Piece Complete



No. 3299



Tail Pieces for Lead Pipe

- No. 3310 Size 1 1/4" (for seats No. 3308 and 3309)
No. 3311 Size 1 1/2" (for seats No. 3308 and 3309)

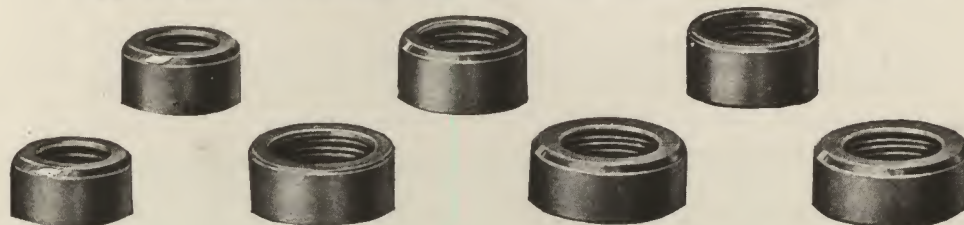


Flush Valve Seat

- No. 3308 Valve Seat, Complete Coupling Nuts 1 1/4"
No. 3309 Valve Seat, Complete - Coupling Nuts 1 1/2"

Brass Seat Caps

Seat Caps with Washers, Page 48 — Seat Cap Assortments Page 48



No.	Outside Diameter	Tapped	Used With
2995	43/64 in.	.566-24	W-W Kwyet Ball Cock
3254	42/64 in.	.28	W-W Little Samson & Beaver Ball Cock
3255	39/64 in.	.566-24	Special
3256	43/64 in.	.622-24	W-W No. 3015 and B. V. C.
3257	43/64 in.	.622-27	Douglas — Small Wolff Ball Cock
3258	43/64 in.	.625-27	Hamilton, Gem, Peerless
3259	47/64 in.	.692-30	"Try Me" and M. V. B.
3260	51/64 in.	.756-27	Success and McShane
3261	51/64 in.	.745-27	Success and McShane
3262	48/64 in.	.692-20	Coyne & Delaney
3263	44/64 in.	.622-27	Hartford
3264	48/64 in.	.692-28	W-W Compound Lever Ball Cock



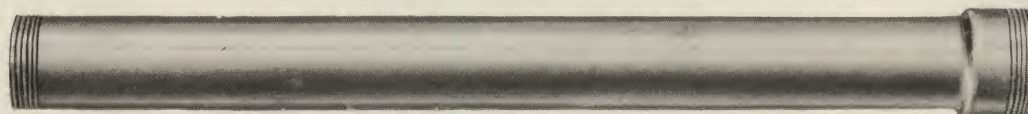
Woodward Wanger Co.



Overflow Tubes

FOR FLUSH VALVES

Threaded Both Ends



Will Fit Either 1" or 1½" Tapping - 11" Long

No. 3316 P - 17 Gauge Seamless Brass Tubing

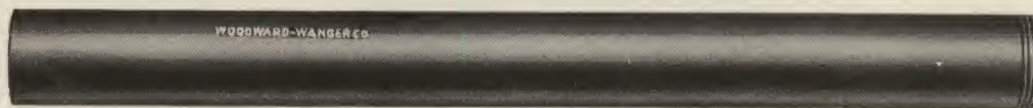
No. 3316 C - Same as above Chromium Plated

Threaded ONE End



No.	Brass		Size	No.	Chrome Plated		Size
	Gauge				Gauge		
3317 P	20		1" x 11"	3317 C	20		1" x 11"
3318 P	17		1" x 11"	3318 C	17		1" x 11"
3319 P	17		1½" x 11"	3319 C	17		1½" x 11"
3320 P	20		1¼" x 11"	3320 C	20		1¼" x 11"

Hard Rubber Overflow Tube



Threaded One End

Hard Rubber Overflow Tubes are desirable in many localities where the Chemical content of the water is destructive to Brass.

No. 3221.....Size 1" x 11"



Woodward Wanger Co.



Float Rods

ANNEALED CHROME PLATED



No. 3200 8" Long $\frac{1}{4}$ " Dia. .. Threaded $\frac{3}{4}$ " one end, 3" other end

No. 3201 12" Long $\frac{1}{4}$ " Dia. .. Threaded $\frac{3}{4}$ " one end, 3" other end

Refill Tubes

Copper Threaded One End



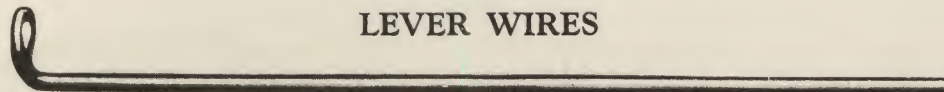
			Threaded
No. 3210	..... $\frac{1}{4}$"	..... 10" Long	..... $\frac{1}{4}$ -40
No. 3211	..... $\frac{1}{4}$"	..... 12" Long	..... $\frac{1}{4}$ -40
No. 3212	..... $\frac{1}{4}$"	..... 16" Long	..... $\frac{1}{4}$ -40
No. 3213	..... $\frac{5}{16}$"	..... 18" Long	..... $\frac{5}{16}$ -32

Threaded Both Ends



No. 3210-T	..... 10" Long	... $\frac{1}{4}$ -40 and $\frac{1}{4}$ -32
No. 3211-T	..... 12" Long	... $\frac{1}{4}$ -40 and $\frac{1}{4}$ -32
No. 3212-T	..... 16" Long	... $\frac{1}{4}$ -40 and $\frac{1}{4}$ -32

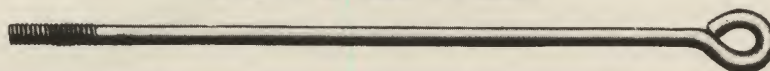
LEVER WIRES



Brass, Chromium Plated

No. 3405	..... 9" Long
No. 3406	..... 12" Long

TANK BALL STEMS



No. 3407	Monel Metal, will not corrode	..... $5\frac{3}{8}$ " Long
No. 3408	Brass,	..... $4\frac{3}{4}$ " Long



Woodward Wanger Co.



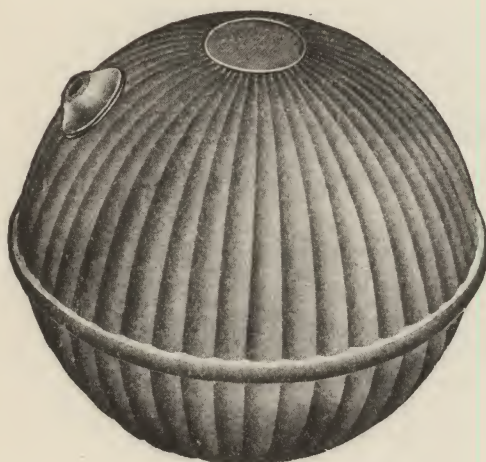
Copper Float Balls

Smooth Copper Floats

Packed 12 to the carton

High quality Spun Brass, in two weights, 8 ounce and 12 ounce.

No. 3271 12 ounce Size 4 x 5"
No. 3272 8 ounce Size 4 x 5"



Corrugated Copper Float

— Round Ball —

A strong, well made, 8 ounce brass float corrugated.

Packed 12 to the carton

No. 3276 Size 5"

Hard Rubber Float

VULCANIZED into a single hollow shell, these hard rubber floats have no seams or joints, and there is no possible chance for water to penetrate into the interior and destroy its buoyancy.

Water, no matter what the chemical content may be, has no effect, for there is nothing to rust or corrode.

This Hard Rubber Float is practically indestructible and will outlast a good many copper floats.

Packed 12 to a carton

No. 3280 Size 4 x 5"
No. 3285 Size 5 x 6"

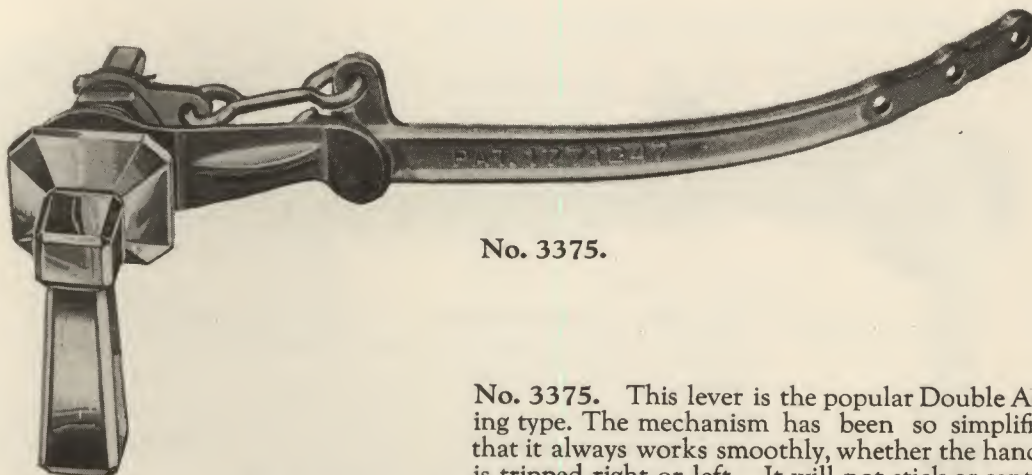




Woodward Wanger Co.



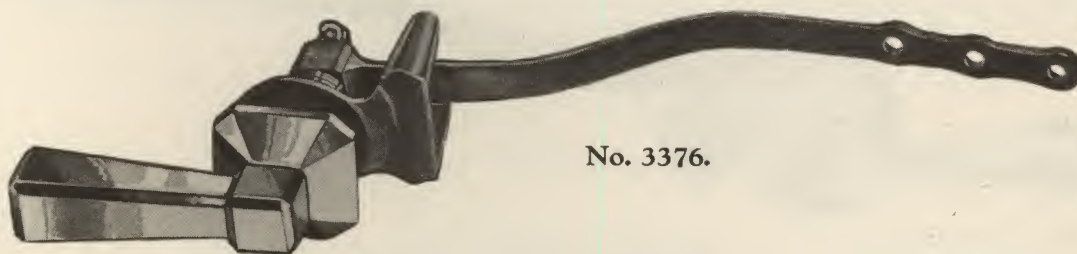
Double Acting Tank Lever



No. 3375.

No. 3375. This lever is the popular Double Acting type. The mechanism has been so simplified that it always works smoothly, whether the handle is tripped right or left. It will not stick or center. The handle, and the rosette, are modern Colonial in design and beautifully chrome plated. Has a cast brass 8" lift arm and a $\frac{5}{8}$ " shoulder to fit standard tank punching.

Press or Single Acting Tank Lever



No. 3376.

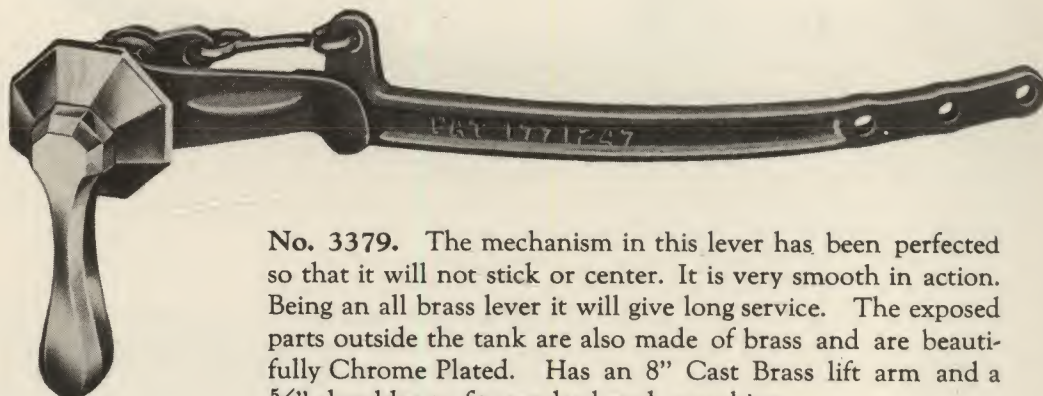
No. 3376. The single acting lever is very simple in construction and Combined with our Colonial designed handle and rosette, makes a very pleasing and satisfactory combination. The handle and rosette are Chromium Plated. The 8" lift arm is Cast Brass, and it has a $\frac{5}{8}$ " shoulder to fit standard tank punching.



Woodward Wanger Co.



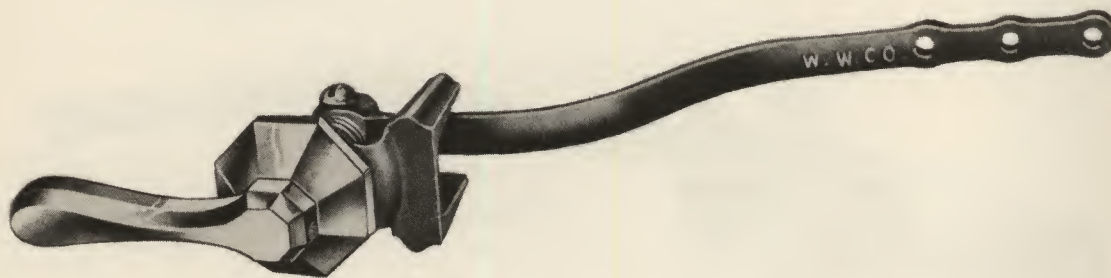
All Brass Double Acting Tank Lever



No. 3379. The mechanism in this lever has been perfected so that it will not stick or center. It is very smooth in action. Being an all brass lever it will give long service. The exposed parts outside the tank are also made of brass and are beautifully Chrome Plated. Has an 8" Cast Brass lift arm and a $\frac{5}{8}$ " shoulder to fit standard tank punching.

No. 3379 $\frac{1}{2}$. Same lever with 1 $\frac{1}{2}$ " longer wrought brass lift arm.

All Brass Press or Single Acting Tank Lever



No. 3380. The mechanism in this lever is very simple. The entire lever, including the handle, is made of brass, insuring long life and service. The exposed parts on the outside of the tank are also made of brass, beautifully designed and Chrome Plated, giving the lever a pleasing and attractive appearance. Has Cast Brass 8" lift arm and a $\frac{5}{8}$ " shoulder to fit standard tank punching.



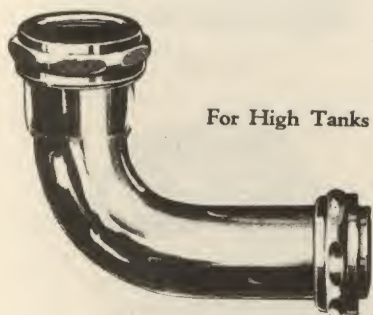
Woodward Wanger Co.



Closet Flush Elbows

Cast Hexagon Nuts, Brass Friction Rings and Rubber Washers

BRASS - NICKEL PLATED OR CHROME



For High Tanks

No.	Nuts for Closet Spud	Slip Joint For Flush	Length from Center of Bend to End
3536	1 1/4 in.	1 1/4 in.	4 in.
3537	1 1/4 in.	1 3/8 in.	4 in.
3538	1 1/4 in.	1 1/2 in.	4 in.
3539	1 1/2 in.	1 1/2 in.	4 in.
3540	1 1/4 in.	1 1/4 in.	8 in.
3541	1 1/4 in.	1 3/8 in.	8 in.

DIPPED NICKEL

No.	Nuts for Closet Spud	Slip Joint For Flush	Length from Center of Bend to End
3542	1 1/4 in.	1 1/4 in.	6 in.

FOR CHROMIUM PLATE ADD "C" TO CATALOG NUMBER; FOR NICKEL PLATE ADD "N. P." TO CATALOG NUMBER.

Two Inch Flush Elbows

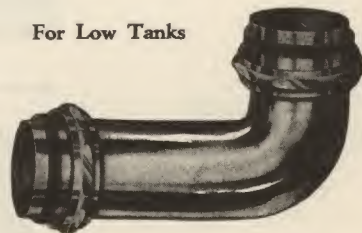
BRASS NICKEL PLATED OR CHROME

COMPLETE WITH NUTS
AND WASHERS

WITHOUT NUTS
AND WASHERS

No.	Length, Center to End	No.	Length, Center to End
3519.....	4 x 6 in.	3523.....	4 x 6 in.
3520.....	5 x 7 in.	3524.....	5 x 7 in.
3521.....	6 x 8 in.	3525.....	6 x 8 in.
3522.....	7 x 9 in.	3526.....	7 x 9 in.

For Low Tanks



FOR CHROMIUM PLATE ADD "C" TO CATALOG NUMBER; FOR NICKEL PLATE ADD "N. P." TO CATALOG NUMBER.

Closet Offsets

BRASS - NICKEL PLATED OR CHROME

Slip Joint
All 6 in. Long



COMPLETE WITH NUTS
AND WASHERS

WITHOUT NUTS AND
WASHERS

No.	Offset, Center to Center	No.	Offset, Center to Center
3551.....	1 in.	3560.....	1 in.
3552.....	1 1/2 in.	3561.....	1 1/2 in.
3553.....	2 in.	3562.....	2 in.
3554.....	2 1/2 in.	3563.....	2 1/2 in.
3555.....	3 in.	3564.....	3 in.

FOR CHROMIUM PLATE ADD "C" TO CATALOG NUMBER; FOR NICKEL PLATE ADD "N. P." TO CATALOG NUMBER.



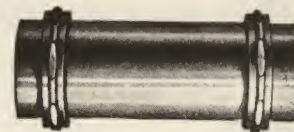
Woodward Wanger Co.



Two Inch Straight Connections

HEAVY BRASS, NICKEL PLATED

No. 3567..... WITH NUTS AND WASHERS Length 6 in.
3568..... WITHOUT NUTS AND WASHERS 6 in.



No. 3567

Brass Slip Joint Nuts

With Brass Friction Rings and Rubber Slip Joint Washers

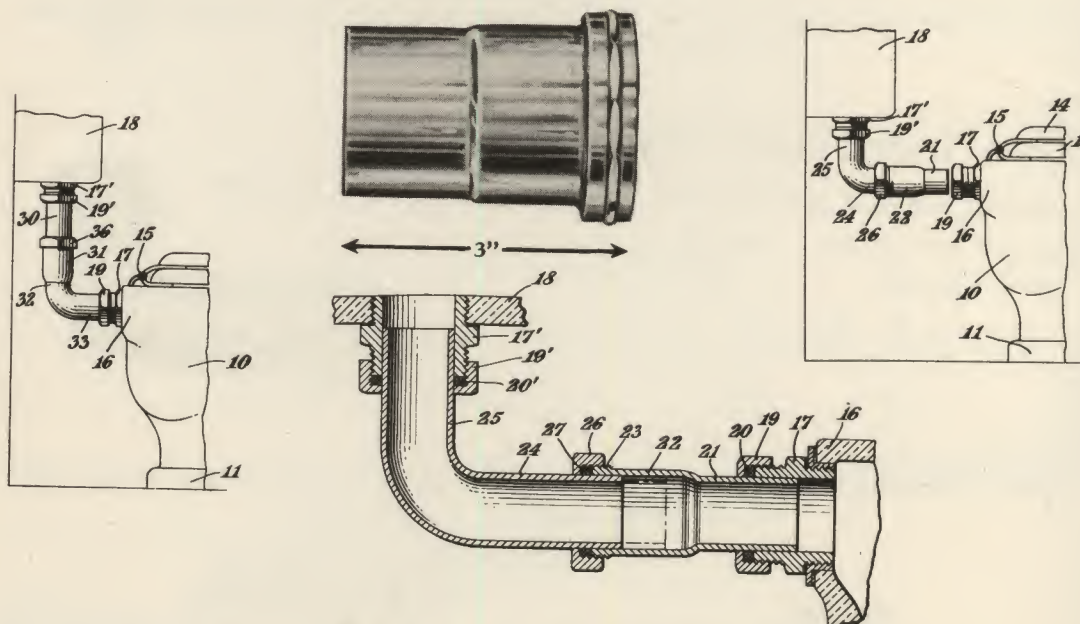
	I. P. Thread in Nut	To Slip Tube
4059.....	2 in.	2 in. O. D.

If either of the above two items are wanted in Chrome, add "C" to Catalog Number.



Closet Elbow Slip Joint Connections

U. S. Patent No. 2021317



(1) No. 3570 Chrome Plated (3)

This newly patented Slip Joint Connection saves the Plumber a lot of unnecessary work, and time when repairing old fixtures. This is especially true where care must be taken in the removal of old toilet tanks and bowls.

Just flush the toilet tank and raise the float ball, and you are ready for work.

(2)

Permits the plumber to remove and replace the closet bowl and elbow without shutting the water off, or removing the toilet tank.

(4)

Will increase the length of any regular closet elbow to any size required.

(5)

This new and recently patented Slip Joint Connection fills a long felt need, and will be enthusiastically welcomed by plumbers.

Steam Specialties & Chemical Goods

Traps & Supply Pipes

Small Brass Specialties



Woodward Wanger Co.



Closet Screws with Heads

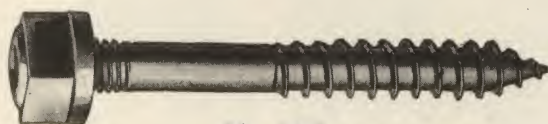
Closet Screws
WITH REMOVABLE N. P. BRASS HEADS



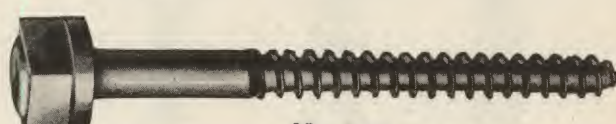
No. 3445



No. 3447



No. 3448

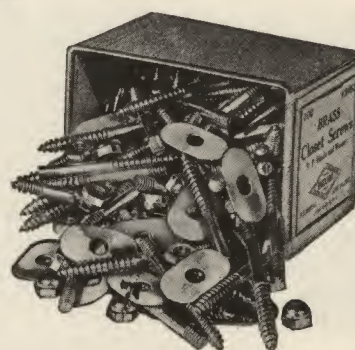
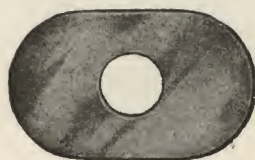


No. 3449

No.		Diameter	Length
3445.....	(Iron Brass Plated)	1/4 in.	2 3/8 in.
3447	(Brass)	1/4 in.	2 3/8 in.
3448.....	(Brass)	5/16 in.	2 1/2 in.
3449.....	(Brass)	5/16 in.	3 1/2 in.

Closet Screw Combinations

No. 3452



- 100—No. 3447 Brass Closet Screws with Removable N. P. Brass Head No. 3461
100—No. 3487 N. P. Oval Shaped Brass Washer, Extra Heavy



No. 3461

Brass Heads—Nickel Plated
CLOSED TOPS
For Closet Screws, Urinal Bolts, &c.



No. 3462

No. Tapped Used on Closet Screws
3461..... 1/4 in. No. 3447

No. Tapped Used on Closet Screws
3462..... 5/16 in. Nos. 3448 and 3449

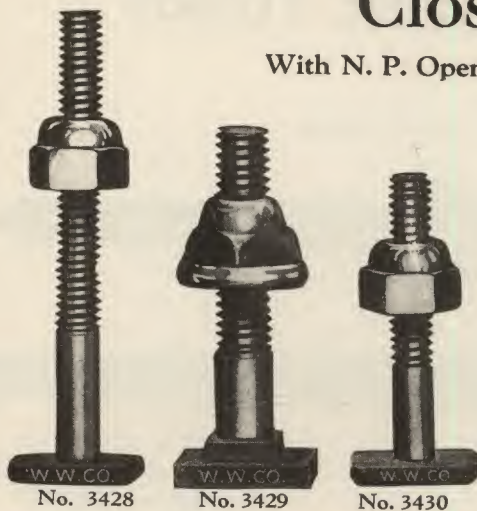


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Closet Bolts

With N. P. Open Brass Heads (Less Washers)



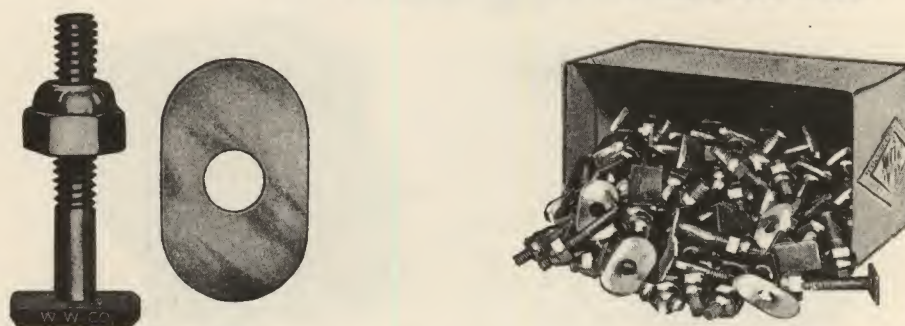
Brass Closet Bolts
With N. P. Open Brass Heads
(Less Washers)

No.	Length Under Head	Diameter	Thread
3427	2 1/4"	5/16	18
3428	2 1/2"	1/4"	20
3429	1 3/4"	5/16"	18
3430	1 3/4"	1/4"	20

Brass Closet Bolt Combination

No. 3433

Consists of our No. 3430 Brass Closet Bolt with N. P. Open Brass Head
No. 3470 and our No. 3482 N. P. Oval Shaped Brass Washer



PACKED 100 EACH OF BOLT, HEAD AND WASHER



No. 3470



No. 3471

Brass Heads — Nickel Plated
Open Tops For Closet Bolts, etc.

No.	Tapped
3470	1/4"
3471	5/16"



Woodward Wanger Co.



Brass Washers, N. P.

Brass Washers—Nickel Plated

For Closet Bolts, Screws, &c.



No. 3482



No. 3483

No.	Length	Width
3482.....	1 1/4 in.	3/4 in.
No.	Size	
3483.....	7/8 in.	

Brass Washers—Extra Heavy—Nickel Plated

For Closet Bolts, Screws, etc.

No.	Style	Size
3486.....	Round.....	7/8" O. D. 5/16" hole
3487.....	Oval.....	1 1/4" long, 3/4" wide, 5/16" hole

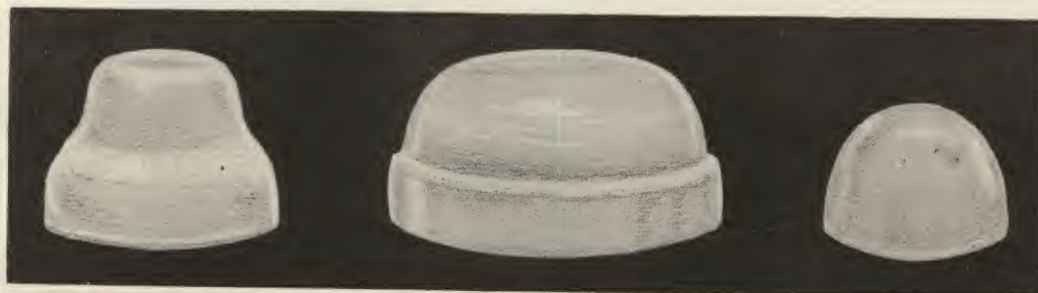


No. 3486



No. 3487

China Caps for Closet Screws and Bolts



No. 3435

No. 3436

No. 3437

No.	Size
3435.....	1" high, 1 3/8" Diameter, 1-1/16" hole
3436.....	1" high, 1 3/4" x 1-5/16" Diameter, 1" x 1 3/8" hole
3437.....	7/8" high, 1-3/16" Diameter, 7/8" hole

Threaded Brass Rod



Nos. 3410

IN ONE FOOT LENGTHS

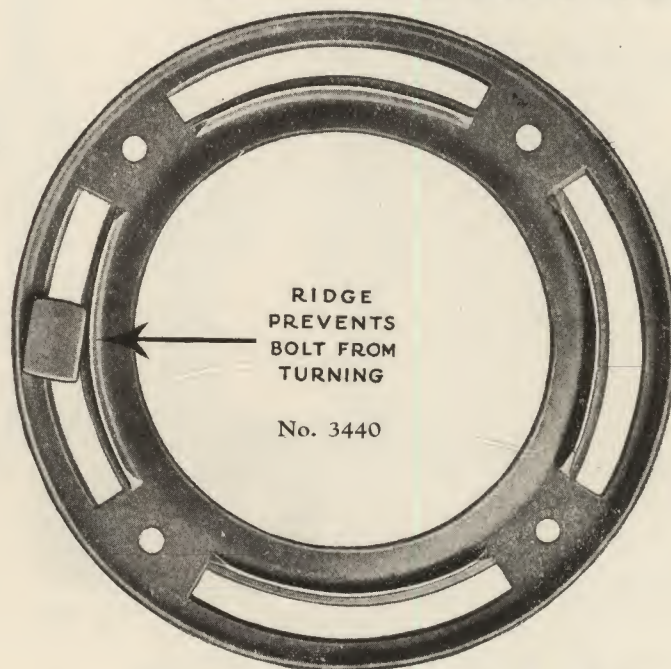
No.	Description
3410.....	1/4 in. Diameter, No. 20 Thread



Woodward Wanger Co.



Closet Floor Flanges



RIDGE
PREVENTS
BOLT FROM
TURNING

No. 3440

Closet Floor Flanges

CAST BRASS—LIGHT

No.	Outside Diameter	Inside Diameter	Weight
3440	6 $\frac{7}{8}$ in.	4 $\frac{1}{4}$ in.	9 oz.

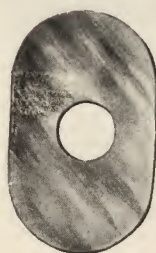
Closet Floor Flanges

CAST BRASS—HEAVY

No.	Outside Diameter	Inside Diameter	Weight
3441	6 $\frac{7}{8}$ in.	4 $\frac{3}{8}$ in.	11 oz.

Closet Floor Flange Combination

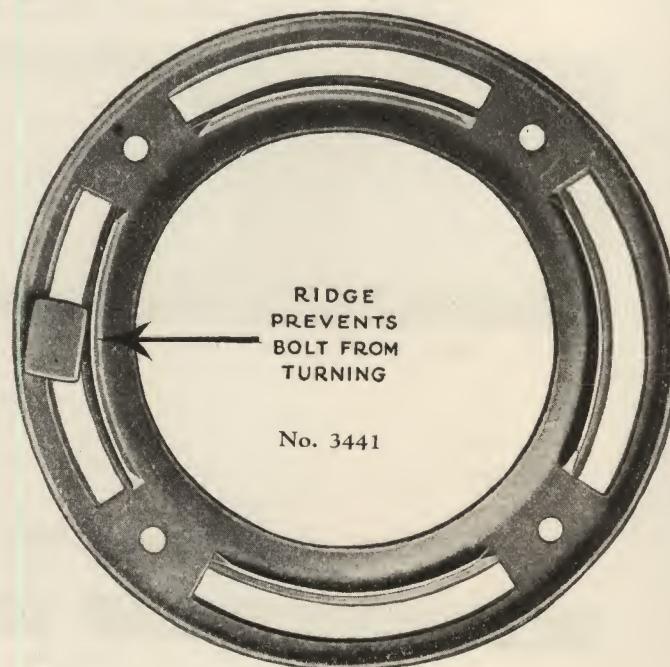
No. 3442



No. 3482



No. 3430



RIDGE
PREVENTS
BOLT FROM
TURNING

No. 3441

Consists of the following:

- 1—No. 3440 Brass Floor Flange
- 2—No. 3430 Brass Closet Bolts with N. P. Open Brass Head No. 3470
- 2—No. 3482 N. P. Brass Washers



Woodward Wanger Co.



Closet Spud Increaser - Reducer

Nickel Plated or Chrome



Closet Spud Increaser

No. 3350 Nickel Plated Brass $1\frac{1}{4}$ " x 2"
No. 3351 Nickel Plated Brass $1\frac{1}{2}$ " x 2"



Closet Spud Reducer

No. 3355 Nickel Plated Brass 2 " x $1\frac{1}{4}$ "
No. 3356 Nickel Plated Brass 2 " x $1\frac{1}{2}$ "

If either of the above two items are wanted in Chrome,
add "C" to Catalog Number.

Closet Spud

With Lock Nut, Flanged Spud Washer and
Galvanized Friction Ring



Made of Cast Brass Metal. Clean Smooth casting without Sand Holes. Of a proper pitched flare and fits into the Closet Bowl without filing. Has a smooth clean water way. Equipped with lugs inside to hold them for tightening. Regularly furnished with flanged closet spud washer and galvanized friction ring.

No. 3371 $1\frac{1}{4}$ "
No. 3373 $1\frac{1}{2}$ "
No. 3372 2 "

Galvanized Friction Ring Only

No. 3371-R
For Closet Spud No. 3371

No. 3372-R
For Closet Spud No. 3372

No. 3373-R
For Closet Spud No. 3373



Cotter Pins

Lock Top Tin Box Assortment

No. 3425 - Consisting of 100 Cotter Pins
20 each of the following sizes.

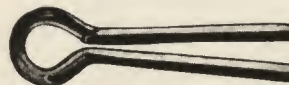
$\frac{1}{8}$ " x $\frac{3}{4}$ " $\frac{5}{32}$ " x 1" $\frac{3}{16}$ " x 1"
 $\frac{1}{8}$ " x 1" $\frac{3}{16}$ " x $1\frac{1}{4}$ "



No. 3425
Assortment

Cotter Pins

Made from Spring Brass



No. 3419— $\frac{1}{8}$ " x $\frac{3}{4}$ "
No. 3420— $\frac{1}{8}$ " x 1"
No. 3421-A— $\frac{5}{32}$ " x 1"

No. 3421-B— $\frac{3}{16}$ " x 1"
No. 3422— $\frac{3}{16}$ " x $1\frac{1}{4}$ "

Steam Specialties & Chemical Goods

Traps & Supply Pipes

Engineered Hoisting



Woodward Wanger Co.



Closet Seat Hinges, and Parts

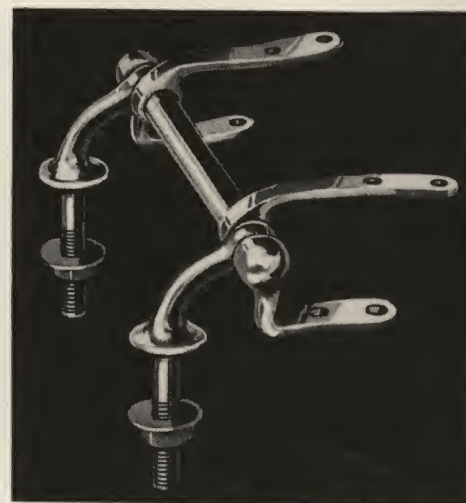
Check, Bar and Concealed Hinges, Washers, Wing Nuts and Posts.



Cast Brass Check Hinge

Adapted only for Seats without lid. Cast Brass, Chrome Plated. Built expressly to prevent seat from falling back. Complete with Screws, Nuts and Washers.

No. 3510 Chrome Plated

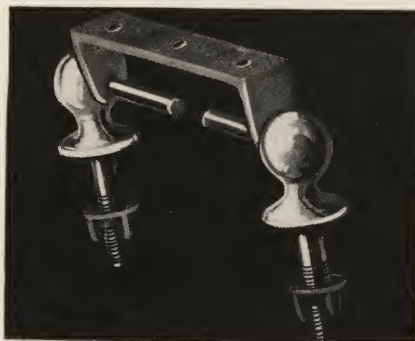


Cast Brass Seat Hinge

Has $\frac{1}{2}$ " bar and is adaptable for $1\frac{1}{4}$ " seat. Square Back type. Complete with Screws, Nuts and Washers.

No. 3511-C Chrome Plated

No. 3511-R Rolled Chrome



For Extended Back Seats

Heavy Cast Brass concealed hinge for extended back seats. Complete with Screws, Nuts and Washers.

No. 3513-W Finished in White

No. 3513-C Finished in Chrome

No.
3514



No.
3516



No.
3515



No.
3517



Parts for Closet Hinges

No. 3514 Rubber Washers $1\frac{1}{8}$ " O. D., $\frac{1}{8}$ " thick, for Hinge Post

No. 3515 Steel Washer for Hinge Post

No. 3516 Brass Wing Nut for Hinge Post

No. 3517 Individual Posts for Closet Seat Hinge

No. 3512 C Close Roughing-In Bar Hinge, will extend Seat $2\frac{1}{2}$ " forward.

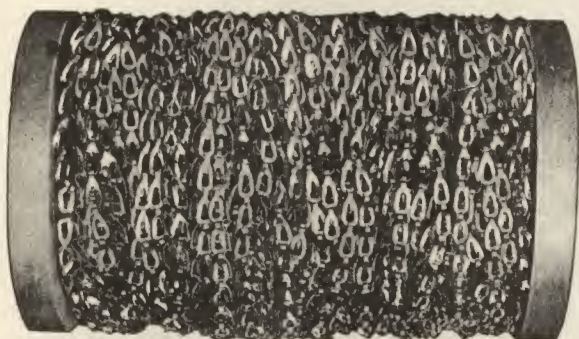
For Closet Seat Bumpers, See Page 34 and 35



Woodward Wanger Co.



Plumber's Chain



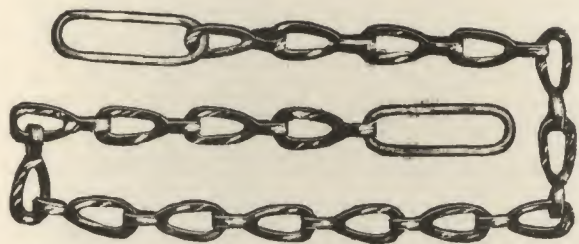
Nickel Plated Only

No.	No. Feet to Reel	Size
3579.....	250	00
3581.....	250	1

Plumber's Chain

PACKED 50 FT. IN BOX

No.	No. Feet in Pkg.	Size
3588.....	50	00
3590.....	50	1



Basin and Bath Chains—N. P. Brass

PACKED ONE DOZEN IN BOX

Each Chain Fitted with N. P. Snap Links

No.	Size	Length	For Use
3591	00	13 in.	Basin
3592	1	16½ in.	Bath

Wash Tray Chains—Brass

Fitted with Snap Links

No.	Size
3593	0

Bead Chain — Chrome Only

Bead Pattern Chain in Continuous Length

We will furnish this popular chain in continuous lengths of any number of feet which may be desired.

No.	
3600	Order by the foot

Bead Pattern Bath and Basin Chains

"Jump" Couplings furnished with each of these chains, as shown.

No.	Length	For
3598	11 in.	Basin
3599	15 in.	Bath



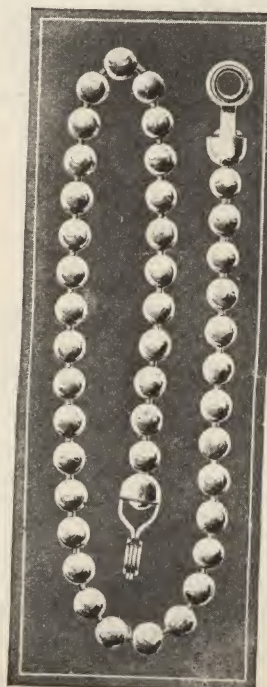
"Jump" Couplings

For Use with Bead Pattern Chain



Type B

No.		
3601 Type A	Jump Couplings	
3602 Type B	Jump Couplings	



Steam Specialties & Chemical Goods

Traps & Supply Pipes

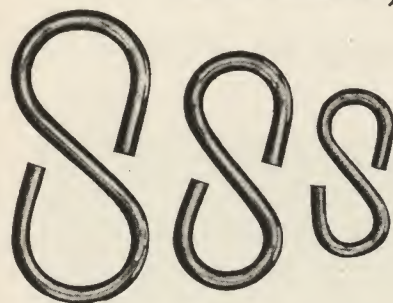
Cast Iron & Steel



Woodward Wanger Co.

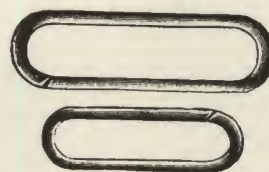


Hooks, Links, Rings, etc.



Eight Hooks

No.	N. P. Brass	Size
3609		Small
3610		Medium
3611		Large



Split Links

N. P. Brass

No.	Size
3616	Small
3617	Large



No. 3618



3619-C

Chain Stay and Stopper
Split Rings

No.	
3618 N. P.	Nickel Plated
3618-C	Chrome Plated
3619-C	Chrome Plated



No. 3622



No. 3625



No. 3620

Chain Stays

Brass — Nickel Plated and Chrome

No.	O. D. of Base	Length of Bolt Under Base	Thread	Nut
3620	7/16 in.	1 5/8 in.	10-24	Square
3622	2 in.	2 in.	9-28	Square
3625	5/16 in.	1 3/8 in.	1/4-20	No Nut

N. P. designates Nickel Plate, "C" designates Chrome Plate.

Faucet Hole Covers

Brass — Nickel Plated and Chrome

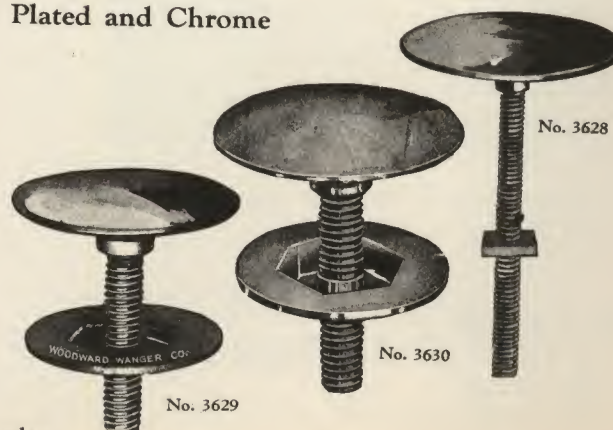
All Heads 1 3/4" Diameter

No. 3628 Wrought Brass. Length of bolt under head 2 - 11/16", threaded 3/16"-28. Square Nut

No. 3629 Wrought Brass. Length of bolt under head 1 3/4", threaded 5/16-18. Flanged Hexagon Nut.

No. 3630 Cast Brass. Length of bolt under head 1-11/16", threaded 5/16-18. Flanged Hexagon Nut.

If wanted in Chrome, add "C" to Catalog Number.



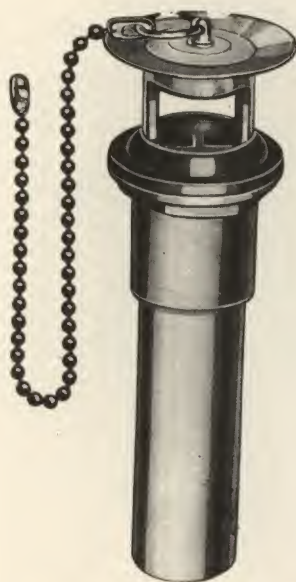


Woodward Wanger Co.



P. O. Plugs with Tail Piece

Cast Plug



Nos. 3645-3647

CHROMIUM PLATED ONLY. $1\frac{1}{4}$ " Cast Brass Plug $2\frac{3}{4}$ " long. Tail Piece made in two pieces, consisting of Cast hexagon flanged sleeve, and a $1\frac{1}{4}$ " Tail Piece.

Tail Piece is 17 gauge, Chromium Plated. Furnished with Beaded Chain, Solid Rubber Stopper and Gasket.

No.	Description
3645	- 17 Gauge, 6" Tail Piece.
3646	- 17 Gauge, 8" Tail Piece.
3647	- 17 Gauge, 12" Tail Piece.

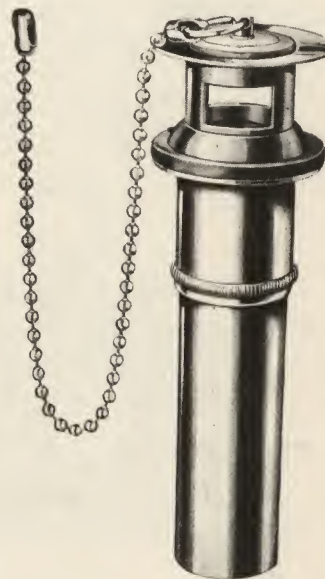
—Cast Brass Plug—

$1\frac{1}{4}$ " Cast Brass Plug $2\frac{3}{4}$ " long, $1\frac{1}{4}$ " - 20 Gauge Wrought Brass Tail Piece.

Furnished with Beaded Chain, Solid Rubber Stopper and Gasket.

No.	Description
3650 N. P.	..... With 6" Tail Piece
3650 - C	..... With 6" Tail Piece
3653 N. P.	..... With 8" Tail Piece
3653 - C	..... With 8" Tail Piece
3654 N. P.	..... With 12" Tail Piece
3654 - C	..... With 12" Tail Piece

Cast Plug



Nos. 3650-3654

Wrought Plug



No. 3655

—Wrought Brass Plug—

$1\frac{1}{4}$ " Wrought Brass Plug $2\frac{3}{4}$ " long.

$1\frac{1}{4}$ " - 20 Gauge Wrought Brass Tail Piece.

Furnished with Beaded Chain, Solid Rubber Stopper and Gasket.

No.	Description
3655 N. P.	..... with 6" long Tail Piece
3655-C	..... with 6" long Tail Piece

N. P. designates Nickel Plate, "C" designates Chrome Plate.



Woodward Wanger Co.



Lavatory Connections

Plug Tops —Cast Brass—

PATENT OVERFLOW

COMMON OVERFLOW



Length . . . 2 3/4"

No. Finish
3635 N.P. Nickel Plated
3635 C Chrome



Length . . . 2 3/4"

No. Finish
3636 N.P. Nickel Plated

Tail Pieces for P. O. Plugs

NICKEL PLATED
OR CHROMIUM FINISH



No.	Finish	Gauge	Length
3637	N. P.	17	6"
3637-C	Chrome	17	6"
3638	N. P.	17	8"
3638-C	Chrome	17	8"
3639	N. P.	17	12"
3639-C	Chrome	17	12"
3640	N. P.	20	6"
3640-C	Chrome	20	6"
3641	N. P.	20	8"
3641-C	Chrome	20	8"
3642	N. P.	20	12"
3642-C	Chrome	20	12"

Offset P. O. Plug

WROUGHT BRASS - NICKEL PLATED

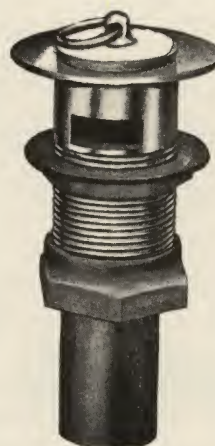


No. 3667 1 1/4", length of offset
6 1/2 in. Offset center to center
3 in. Plug length 3 in. Fitted
with rubber stopper.

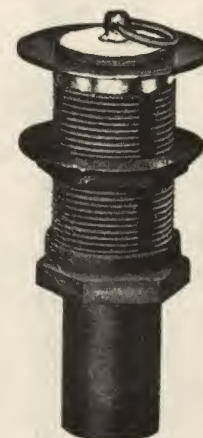
No. 3667-C . . Same in Chrome

Lavatory Plugs for Lead Pipes.

CHROME PLATED TOP — CAST BRASS PARTS



No. 3657 Patent Overflow
Length of Body — 2 1/2"



No. 3659 Common Overflow
Length of Body — 1 3/4"

Both the above are supplied with Tail Piece
for Lead Pipe, and Rubber Stopper. No chain.

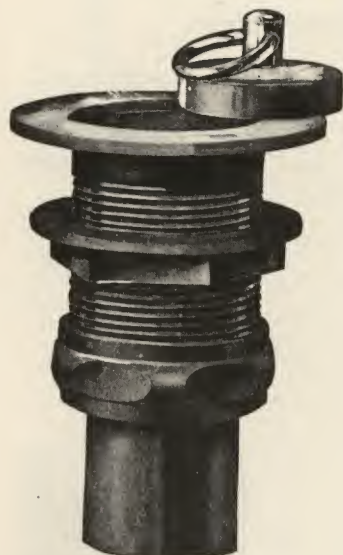


Woodward Wanger Co.



Laundry Tray Plugs

For Soapstone, Slate and Earthenware Wash Trays.



Nos. 3722-3723

—Plug with Coupling—
Top Polished Brass, with Finished
Brass Stopper.

No.	Size	Thread	Flange	Length of Thread
3722	1 1/4"	1 1/4" I.P.	3"	2 5/8"
3723	1 1/2"	1 1/2" I.P.	3"	2 3/4"

—Plug without Coupling—
Top Polished Brass with Finished Brass Stopper,
less tail piece and coupling nut.

No.	Size	Thread	Flange	Length of Thread
3725	1 1/2"	1 1/2" I.P.	3"	2 3/4"



No. 3726

Wrought Brass Plug
For Wooden Wash Trays, Top Polished Brass
with Finished Brass Stopper.

No.	Bolts	Diameter of Flange
3726	2 1/4" long	3 3/8"



Nos. 3715-3716

Brass Plugs and Stoppers
For Laundry Trays and Bath Tubs, Top Polished
Brass with Finished Brass Stopper.

No.	Size	Diameter of Flange
3715	1 1/4"	1 7/8"
3716	1 1/2"	2"

Brass Stopper Only
In Finished Brass for No. 3715 and No. 3716

No.	Size
3719	1 1/4"
3720	1 1/2"



Woodward Wanger Co.



Sink and Urinal Connections



No. 3670 - 3671

Sink Connection

WROUGHT BRASS—NICKEL PLATED

No.	Size	Length under Shoulder
3670.....	1 1/4"	6"
3671.....	1 1/2"	6"

Urinal Connection

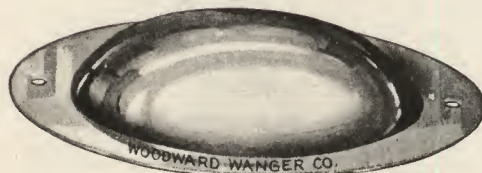
WROUGHT BRASS, NICKEL PLATED

No.	Size and Description
3674	1 1/4 in. Length over all, 4 1/2 in. Length of Tube part, 3 in. Diameter at Top, 2 1/4 in.
3675	1 1/2 in. Length over all, 4 1/2 in. Length of Tube part, 3 in. Diameter at Top, 2 1/2 in.



No. 3674

Trap Covers



No. 3710

Brass Trap Cover

NICKEL PLATED

Heavy Brass, Highly Finished

No.	Diameter	Height at Center
3710.....	6"	13/16"
3711.....	6"	Flat Trap Cover



Woodward Wanger Co.



Faucet Repairs



Nos. 3730-3731

Brass Faucet Repairs—Polished COMPLETE

No.	For Faucets
3730.....	$\frac{1}{2}$ in.
3731.....	$\frac{5}{8}$ in.

Brass Faucet Repairs—Polished LESS HANDLES

No.	For Faucets
3732.....	$\frac{1}{2}$ in.
3733.....	$\frac{5}{8}$ in.

Brass Faucet Hose Ends FOR SOLDERING ON SPOUT OF PLAIN FAUCET

No.	For Faucets
3736.....	$\frac{1}{2}$ in.
3737.....	$\frac{5}{8}$ in.



Nos. 3736-3737

"Fitz" Universal Bath Faucet Hose Connection FITS ANY BATH FAUCET THREAD

By merely pushing into place and screwing up the washer it is made tight, rigid and ready to use. The dogs engage the inner threads of the faucet and it may be detached by simply unscrewing.

No.	Description
3738.....	"Fitz" Universal Bath Faucet Hose Connection



No. 3738

Royle Hose Connections

No.	For Faucets
3742.....	For Attaching Hose to Plain Faucet $\frac{1}{2}$ in.
3743.....	For Attaching Hose to Plain Faucet $\frac{5}{8}$ in.



Nos. 3742-3743

Rubber Washers for Royle Hose Connections

552.....	For $\frac{1}{2}$ in. Faucets	553.....	For $\frac{5}{8}$ in. Faucets
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Anti-Splasher Water Filters



Nos. 3744-3745

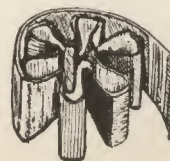
Anti-Splash, Nickel Plated. Fitted with Sanitary Screen and Rubber Washers.

No. 3744...for $\frac{1}{2}$ " Faucets

No. 3745...for $\frac{5}{8}$ " and $\frac{3}{4}$ " Faucets

Spider-Web Type, Spring Brass. Slips inside the opening in nozzle and smooths out the flow of water.

No. 3746...fits $\frac{1}{2}$ " or $\frac{5}{8}$ " Faucets.



No. 3746



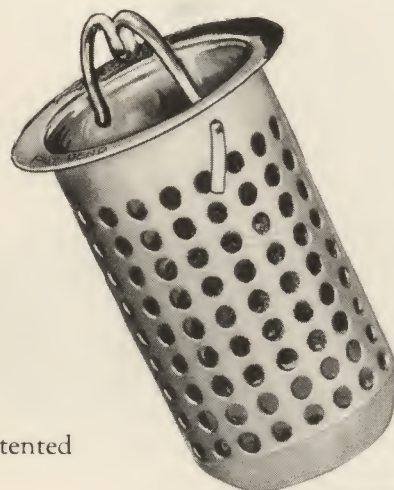
Woodward Wanger Co.



Combination Basket Sink Strainer and Stopper

CHROMIUM PLATED

No. 4245

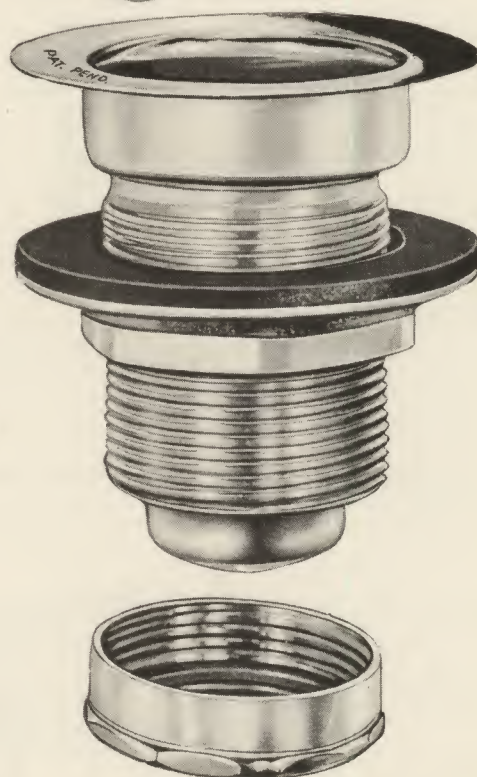


Patented

THE use of this Strainer permits the Sink to be filled with water and used for Washing Dishes or Cleaning Vegetables.

The Sink can be emptied without clogging the drain as the basket acts as a catch-all for Materials that would ordinarily stop up the trap or drain pipe.

No. 4245 For Sinks with 2" to 2½" drillings. Flange 3" in diameter, Body 2¾" long. Extra long Basket 2½" deep.



Strainer less
tail piece.

The perforated basket is raised or lowered by simply flipping the little wire bail or handle from one side to the other. This is done with the tip of the finger. It works smoothly and easily. When the basket is lowered a complete shut-off is obtained and the sink fills with water. When the basket is raised it makes a clear water-way for the water to drain off.

After draining the Sink, the Basket Strainer can be lifted out and emptied.

There is nothing complicated about it, and nothing to get out of order.

For Tail Piece see Page 16

- ◆ The above is without Tail Piece
- ◆ For Tail Pieces to fit, see Page 16



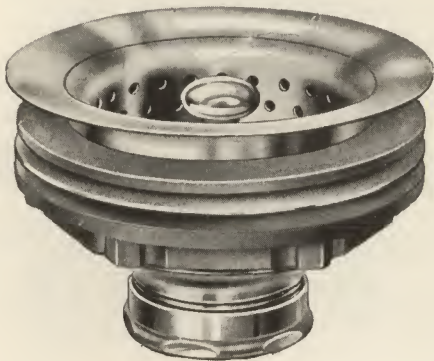
Woodward Wanger Co.



Combination Crumb Cup Sink Strainer and Stopper

• CHROMIUM PLATED •

No. 4250



No. 4250

Made to fit sinks with $3\frac{1}{2}$ " outlet.

Strainer less Tail Piece, with Satin Chrome Coupling Nut.

Will fit $1\frac{1}{4}$ " or $1\frac{1}{2}$ " Tail Piece.

Diameter of flange $4\frac{1}{2}$ " made to fit sinks with hole $3\frac{1}{2}$ " diameter. Crumb Cup can be removed to be emptied.

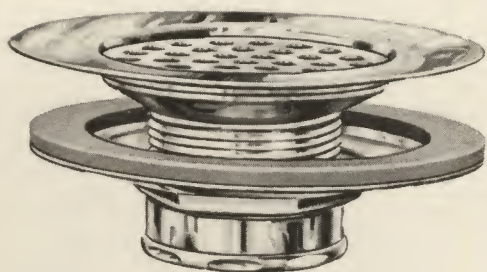
Attached to the Crumb Cup is a metal Stopper which by turning retains water in the sink.

For Tail Pieces see Page 16

Sink Strainer

CHROMIUM PLATED

No. 4255



No. 4255

Strainer less Tail Piece with Satin Chrome Coupling Nut.

Will fit $1\frac{1}{4}$ " or $1\frac{1}{2}$ " Tail Piece.

Diameter of flange $4\frac{1}{2}$ " made to fit sinks with $3\frac{1}{2}$ " outlet.

$2\frac{3}{4}$ " removable strainer for quick draining.

Furnished with Metal and Rubber Washers.

For Tail Pieces see Page 16



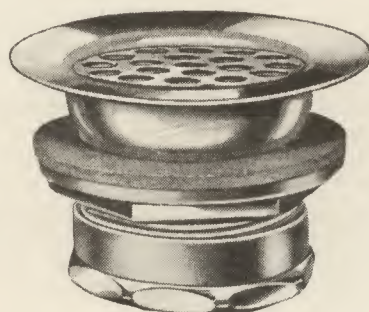
Woodward Wanger Co.



Sink Strainer

CHROME OR NICKEL PLATED TOP

No. 4265



No. 4265

Strainer less tail piece. Furnished with Satin Chrome Coupling Nut.

Will fit 1 1/4" and 1 1/2" Tail Piece.

Diameter of flange 3". Made to fit sinks with 2" to 2 1/2" outlets.

Furnished with leather Washer and lock Nut.

No. 4265 N. P. Nickel Plated

No. 4265 C Chrome Plated

For Tail Piece see below.

Tail Pieces for All Sink Strainers and Tray Plugs

Satin Nickel, Polished Nickel and Chrome

Size 1 1/4"

CATALOG NUMBERS and FINISH

Size	Length.	Gauge	Chrome Plated	Polished Nickel	Satin Nickel
1 1/4	4"	22			4270
1 1/4	6"	22	4271C	4271 N.P.	
1 1/4	6"	17	4272C	4272 N.P.	
1 1/4	8"	17	4273C	4273 N.P.	
1 1/4	8"	22	4274C	4274 N.P.	
1 1/4	12"	22	4275C	4275 N.P.	

Size 1 1/2"

Size	Length.	Gauge	Chrome Plated	Polished Nickel	Satin Nickel
1 1/2	4"	22			4276
1 1/2	6"	22	4277C	4277 N.P.	
1 1/2	6"	17	4278C	4278 N.P.	
1 1/2	8"	17	4279C	4279 N.P.	
1 1/2	8"	22	4280C	4280 N.P.	
1 1/2	12"	22	4281C	4281 N.P.	



4270-4275



4276-4281



Woodward Wanger Co.



Sink Strainers

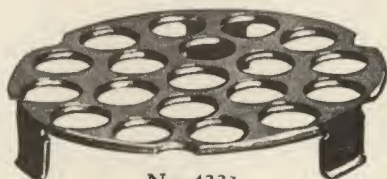


No. 4260

Crumb Cup for Sink Strainer

No. 4260

Polished Chrome. Can be substituted in place of Snap in Strainer. Will fit all standard makes of sink strainers.



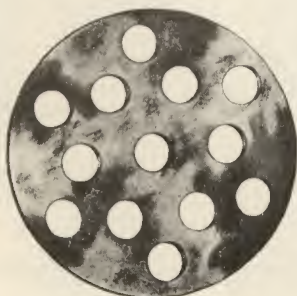
No. 4331

Snap In Sink Strainer

No. 4331

Polished Chrome. Will fit all standard makes of sink strainers.

Diameter $1\frac{7}{8}$ "



Nos. 4332-4335

Small Brass Strainer

Brass or Chrome

No. 4332	Plain Brass	$1\frac{1}{2}$ " Diameter
No. 4333	Chrome	$1\frac{1}{2}$ " Diameter
No. 4334	Plain Brass	2" Diameter
No. 4335	Chrome	2" Diameter

Brass Sink Strainer

Chrome or Nickel Plate



Nos. 4303-4304

No.	Finish	Outside Diameter	Bolt Holes Center to Center
4303 N.P.	Nickel Plate	$4\frac{5}{8}$ "	$3\frac{7}{8}$ "
4303C	Chrome	$4\frac{5}{8}$ "	$3\frac{7}{8}$ "
4304 N.P.	Nickel Plate	$4\frac{1}{2}$ "	$3\frac{5}{8}$ "
4304C	Chrome	$4\frac{1}{2}$ "	$3\frac{5}{8}$ "

Iron Sink Strainers



Nos. 4309-4316

	Outside Diameter	Bolt Holes Center to Center
4309.....	$4\frac{1}{2}$ in.	$3\frac{5}{8}$ in.
4310.....	$4\frac{5}{8}$ in.	$3\frac{3}{4}$ in.
4311.....	$4\frac{3}{4}$ in.	$3\frac{3}{4}$ in.
4312.....	5 in.	$3\frac{7}{8}$ in.
Galvanized Iron		
4313.....	$4\frac{1}{2}$ in.	$3\frac{5}{8}$ in.
4314.....	$4\frac{5}{8}$ in.	$3\frac{3}{4}$ in.
4315.....	$4\frac{3}{4}$ in.	$3\frac{3}{4}$ in.
4316.....	5 in.	$3\frac{7}{8}$ in.



Woodward Wanger Co.



Extension Tubes and Pipe Covers

Extension Tubes to Solder

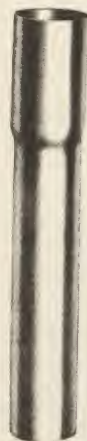
CHROME OR NICKEL PLATED

Nickel Plated

No.	Size	Gauge
7350 N. P.	1¼" x 6"	20
7351 N. P.	1½" x 6"	20
7352 N. P.	1¼" x 8"	20
7353 N. P.	1½" x 8"	20
7360 N. P.	1¼" x 8"	17

Chrome Plated

No.	Size	Gauge
7350 -C	1¼" x 6"	20
7351 -C	1½" x 6"	20
7352 -C	1¼" x 8"	20
7353 -C	1½" x 8"	20
7360 -C	1¼" x 8"	17



Extension Tubes to Slip

Nickle Plated

—All 20 Gauge—

No. 7361 N. P.
1¼" x 6"
No. 7363 N. P.
1½" x 6"

No. 7362 N. P.
1¼" x 8"
No. 7364 N. P.
1½" x 8"

Chrome Plated

—All 20 Gauge—

No. 7361C
1¼" x 6"
No. 7363C
1½" x 6"

No. 7362C
1¼" x 8"
No. 7364C
1½" x 8"



Flanged Covering Tubes

Nickel Plated or Chrome

No.	O. D.	To Cover	Length	Finish
7365 N. P.	2"	1½"	6"	N.P.
7365 C	2"	1½"	6"	Chrome
7366 N. P.	2½"	2"	6"	N.P.
7366 C	2½"	2"	6"	Chrome

Straight Covering Tubes

Nickel Plated or Chrome

No.	O. D.	To Cover	Length	Finish
7367 N. P.	1¾"	1¼" I. P.	6"	N.P.
7367 C	1¾"	1¼" I. P.	6"	Chrome
7368 N. P.	2"	1½" I. P.	6"	N.P.
7368 C	2"	1½" I. P.	6"	Chrome
7369 N. P.	2½"	2" I. P.	6"	N.P.
7369 C	2½"	2" I. P.	6"	Chrome





Woodward Wanger Co.



Drains and Urinal Strainers

Overflow Drains

No. 4287 Combination

1 $\frac{1}{4}$ " O. D. Standing Overflow Waste Tube with expanded top, 7 $\frac{1}{2}$ " over all. Common Overflow, Wrought Drain Plug, with Tail Piece No. 3659 for lead pipe. Diameter of Flange 2 $\frac{1}{8}$ ", Shank 1 $\frac{3}{4}$ ".

No. 4288 Combination

1 $\frac{1}{4}$ " O. D. Standing Overflow Waste Funnel, 8" over all. Common Overflow, Wrought Drain Plug, with Tail Piece No. 3659 for lead pipe. Diameter of Flange 2 $\frac{1}{8}$ ", Shank 1 $\frac{3}{4}$ ".

—Individual Pieces—

No. 4285

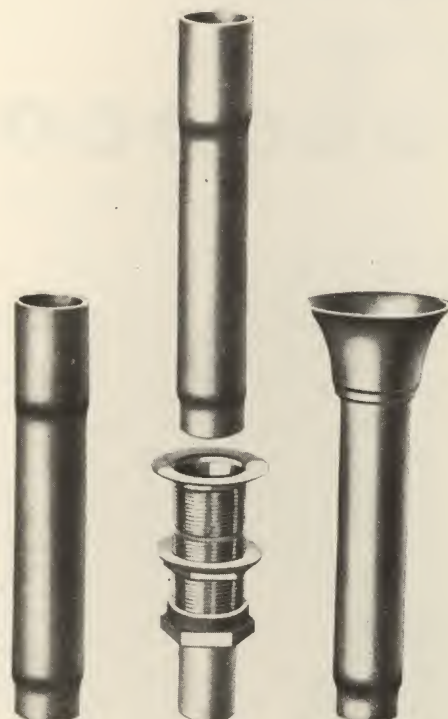
1 $\frac{1}{4}$ " O. D. Standing Overflow Waste Tube with expanded Top - 7 $\frac{1}{2}$ " over all.

No. 4286

1 $\frac{1}{4}$ " O. D. Standing Overflow Waste Funnel 8" over all.

No. 3659

Common Overflow Wrought Drain Plug with Tail Piece for Lead Pipe. Diameter of Flange 2 $\frac{1}{8}$ ", Shank 1 $\frac{3}{4}$ " (Illustrated and described on Page 10)



No. 4285

No. 3659

No. 4286

Beehive Strainers for Urinals

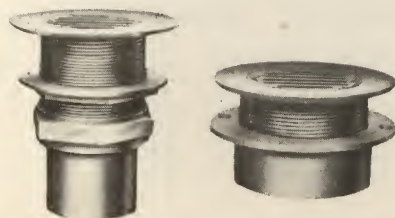
For Urinal Troughs, in Finished Brass or Nickel Plated.



Nos. 4291-4292

No.	Diameter of Flange	Size of Coupling	Finish
4291 B	2 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	Finished Brass
4291 N. P.	2 $\frac{3}{4}$ "	1 $\frac{1}{2}$ "	Nickel Plated
4292 B	3 $\frac{1}{4}$ "	2"	Finished Brass
4292 N. P.	3 $\frac{1}{4}$ "	2"	Nickel Plated

Urinal, Shower and Slop Sink Drains



No. 4293

Nos. 4294-4295

No.	Diameter of Flange	Size of Coupling	Finish
4293	4½"	2½"	Brass

No.	Dia. of Flange on Strainer	Dia. of Flange on Floor Plate	Dia. of Body on Floor	Finish
4294	4½"	4¾"	3½"	Brass
4295	4¾"	4¾"	3½"	Brass



Woodward Wanger Co.



Faucet Screws and Nuts

BRONZE $\frac{3}{8}$ " - SMALL HEAD



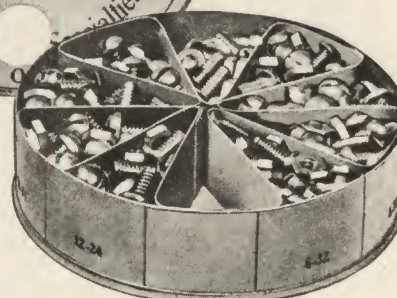
3753 3754 3755 3756 3757 3758 3759



3762 3763 3764 3765 3766 3767 3768



The circular shaped box is so arranged that any size desired can be turned to the opening in the lid, and the screws and nuts easily removed. A very handy, convenient and orderly way to carry bibb nuts and screws.



No. 3750

ACCURATE SIZES

PERFECT THREADS

ONE GROSS ASSORTMENT Bronze Bibb Screws and Nuts

No. 3750

Consists of 72 screws and 72 nuts. An equal quantity of each of the following sizes:

Screw Gauge No.	Threads to the inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24

ONE GROSS ASSORTMENT Bronze Bibb Screws Only

No. 3751

Consists of 144 screws ONLY - all $\frac{3}{8}$ " long. An equal quantity of each of the following sizes:

Screw Gauge No.	Threads to the inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24

Note: Customer may, if desired, change either of these two Assortments to suit his own particular needs, at no additional cost.

SEE FOLLOWING PAGE FOR VARIOUS SIZES, LISTED SEPARATELY



Woodward Wanger Co.



Faucet Screw Assortments



No. 3753 No. 3754 No. 3755 No. 3756 No. 3757 No. 3758 No. 3759



MONEL METAL
OR
BRONZE

ONE GROSS ASSORTMENT

Bronze Screws $\frac{3}{8}$ " and $\frac{1}{2}$ " Long

No. 3749

Quantity	Length	Screw Gauge	Thread To Inch	
6	$\frac{3}{8}$ "	6	32	Chrome
12	$\frac{3}{8}$ "	6	32	Bronze
4	$\frac{1}{2}$ "	6	32	"
12	$\frac{3}{8}$ "	8	32	"
4	$\frac{1}{2}$ "	8	32	"
6	$\frac{3}{8}$ "	9	32	Chrome
12	$\frac{3}{8}$ "	9	32	Bronze
4	$\frac{1}{2}$ "	9	32	"
12	$\frac{3}{8}$ "	10	32	"
4	$\frac{1}{2}$ "	10	32	"
18	$\frac{3}{8}$ "	10	28	"
4	$\frac{1}{2}$ "	10	28	"
6	$\frac{3}{8}$ "	9	24	"
4	$\frac{1}{2}$ "	9	24	"
6	$\frac{3}{8}$ "	10	24	Chrome
24	$\frac{3}{8}$ "	10	24	Bronze
6	$\frac{1}{2}$ "	10	24	"

ONE GROSS ASSORTMENT

MONEL METAL

Screws Only — $\frac{3}{8}$ " Long

No. 3751.M

Screw Gauge No	Threads to the inch
6	32
8	32
9	32
9	24
10	32
10	28
10	24

Monel Metal will not rust or corrode, so it is the ideal material from which to make faucet screws. They cost a little more and are well worth it, because they last almost indefinitely.

Note: Customer may, if desired, change either of these two Assortments to suit his own particular needs, at no additional cost.



Woodward Wanger Co.



Faucet Screws and Nuts



No. 3753 No. 3754 No. 3755 No. 3756 No. 3757 No. 3758 No. 3759

Bronze or Monel Metal Bibb Screws

Length— $\frac{3}{8}$ Inch

No.	Size
3753.....	6-32
3754.....	8-32
3755.....	9-32
3756.....	10-32
3757.....	10-28
3758.....	9-24
3759.....	10-24

* MONEL METAL — If any of the above screws are wanted in Monel Metal add "M" to Catalog Number.

Bronze Bibb Screws

Length— $\frac{1}{2}$ Inch

No.	Size
L-3753.....	6-32
L-3754.....	8-32
L-3755.....	9-32
L-3756.....	10-32
L-3757.....	10-28
L-3758.....	9-24
L-3759.....	10-24

Faucet Screw Nuts



3762 3763 3764 3765 3766 3767 3768

Bronze Faucet Nuts

ACCURATE SIZES—PERFECT THREADS

No.	Size
3762.....	6-32
3763.....	8-32
3764.....	9-32
3765.....	10-32
3766.....	10-28
3767.....	9-24
3768.....	10-24



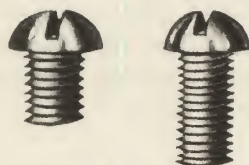
Woodward Wanger Co.



Plumbers Machine Screws

• BRASS •

Accurate Sizes



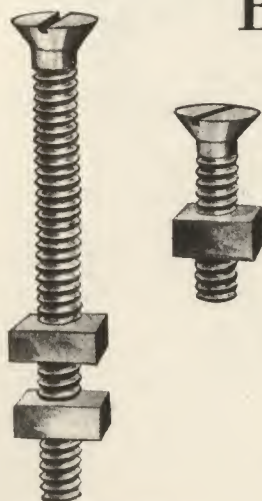
• BRASS •

Perfect Threads

Screw Gauge Number	Threads to the Inch	LENGTH							
		3/8"	1/2"	5/8"	3/4"	1"	1 1/4"	1 1/2"	2"
4	36	No. 3868	3871	3873	3874	3875	3876	3877	3878
6	32	*No. 3753	* L3753	3873A	3874A	3875A	3876A	3877A	3878A
8	32	*No. 3754	* L3754	3873B	3874B	3875B	3876B	3877B	3878B
9	24	*No. 3758	* L3758	3873C	3874C	3875C	3876C	3877C	3878C
9	32	*No. 3755	* L3755	3873D	3874D	3875D	3876D	3877D	3878D
10	24	*No. 3759	* L3759	3873E	3874E	3875E	3876E	3877E	3878E
10	28	*No. 3757	* L3757	3873F	3874F	3875F	3876F	3877F	3878F
10	32	*No. 3756	* L3756	3873G	3874G	3875G	3876G	3877G	3878G
11	24	No. 3869	3872	3873H	3874H	3875H	3876H	3877H	3878H
12	24	No. 3870	3872A	3873J	3874J	3875J	3876J	3877J	3878J
14	20	No. 3870A	3872B	3873K	3874K	3875K	3876K	3877K	3878K

* Bronze instead of Brass—listed also under Faucet Screws

Brass and Iron Bolts



Nos. 3935-3970

Sink bolts 1 1/4 in. and less are furnished with one square iron nut.

Sink bolts 1 1/2 in. and longer are furnished with two square iron nuts.

Iron Sink Bolts

1/4 in.

No.	Length
3935.....	1 in.
3936.....	1 1/4 in.
3937.....	1 1/2 in.
3938.....	2 1/4 in.
3939.....	2 1/2 in.
3940.....	3 in.

Brass Sink Bolts

1/4 in.

No.	Length
3955.....	1 in.
3956.....	1 1/4 in.
3957.....	1 1/2 in.
3958.....	2 1/4 in.
3959.....	2 1/2 in.
3960.....	3 in.

Iron Sink Bolts

With Nickel-Plated Heads

No.	Length
3945.....	1 in.
3946.....	1 1/4 in.
3947.....	1 1/2 in.
3948.....	2 1/4 in.
3949.....	2 1/2 in.
3950.....	3 in.

Brass Sink Bolts

With Nickel-Plated Heads

No.	Length
3965.....	1 in.
3966.....	1 1/4 in.
3967.....	1 1/2 in.
3968.....	2 1/4 in.
3969.....	2 1/2 in.
3970.....	3 in.



Woodward Wanger Co.



Boiler Repair Plugs

ACTUAL SIZE



No. 3785

Case Hardened tool steel, Nickel Plated. Has coarse thread which will follow the thickness of the metal in the boiler, and permit pulling the washer up tight, and making a permanent repair.

Furnished with Red Fibre Washer

No. 3785 $\frac{3}{8}$ "
No. 3786 $\frac{7}{16}$ "

ACTUAL SIZE

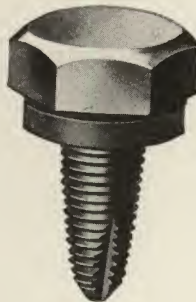


No. 3786

"Handy" Tap Repair Plugs



No. 3777



No. 3778



No. 3779

MADE FROM SPECIAL CARBON STEEL, TEMPERED

A quick and permanent repair for boilers, radiators, soil pipe, fittings, etc. Designed upon scientific principles, with perfectly machined threads and sharp cutting edges.

SELF TAPPING—SELF THREADING

Packed in boxes of one dozen of a size.

Also in boxes containing three or six dozen assorted.

No.	Diameter Under Head	Length Under Head	Diameter of Hexagonal Head
3775.....	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	$\frac{1}{2}$ in.
3776.....	$\frac{5}{16}$ in.	$\frac{3}{4}$ in.	$\frac{5}{8}$ in.
3777.....	$\frac{3}{8}$ in.	$\frac{7}{8}$ in.	$\frac{3}{4}$ in.
3778.....	$\frac{7}{8}$ in.	1 in.	$\frac{7}{8}$ in.
3779.....	$\frac{1}{2}$ in.	$1\frac{1}{8}$ in.	1 in.

Handy Repair Plug Assortment

Nos. 3781-3782

For the convenience of our customers who desire to have a complete assortment of all sizes of the Handy Tap Repair Plugs available at all times, we pack two different assortments.

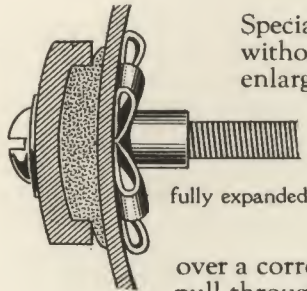
No.	Description
3781.....	Box containing 3 dozen, assorted sizes
3782.....	Box containing 6 dozen, assorted sizes



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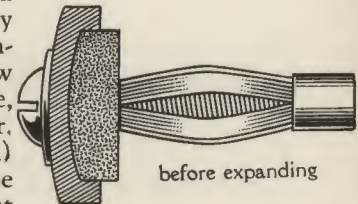


Boiler Repair Plugs



fully expanded

Special New Type Expansion Boiler Plug, installed without the use of any special tools. You merely enlarge the leak in the boiler to a $\frac{3}{8}$ " opening, insert this boiler plug, and with screw driver draw up as tight as possible, and you have a permanent repair. (See "fully expanded" illustration) It makes a "5-point contact" on the inside of the Boiler reaching out over a corroded area of $1\frac{1}{8}$ ", therefore, it will not cut or pull through the weakened walls. It is really a bolt and nut assembly, with an over-sized nut, or "5-pointed spider" to make a secure and permanent repair.



before expanding

No. 3784 One Size Only for all Repairs



No. 3830

Boiler Repair

Extra Heavy

This repair is still a favorite with many plumbers, especially for use on jobs where the metal is rather thin at the point of leakage. This is the only type of Boiler Repair which will give satisfaction in such cases. Well and strongly made. Fitted with extra durable rubber washer.

No. 3830 Boiler Repair

Wash Tray Bolts



No.	BRASS	Length
3971	1 $\frac{1}{2}$ in.

Iron Stove Bolts



Packed 100 Per Carton

ROUND HEAD $\frac{1}{4}$ IN.

No.	Length	No.	Length
3818 $\frac{1}{2}$ in.	3822 1 in.
3819 $\frac{5}{8}$ in.	3823 $1\frac{1}{4}$ in.
3820 $\frac{3}{4}$ in.	3824 $1\frac{1}{2}$ in.
3821 $\frac{7}{8}$ in.	3825 2 in.




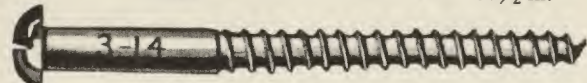
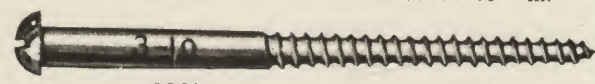
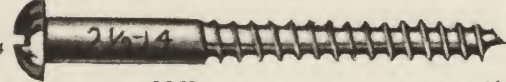

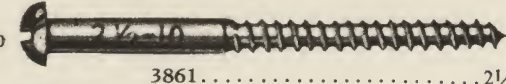
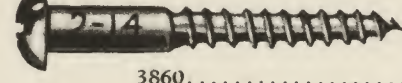
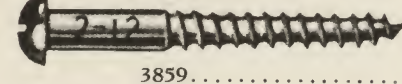
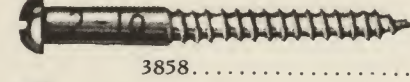
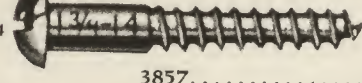
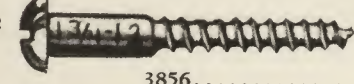
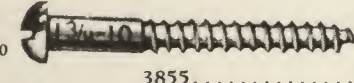
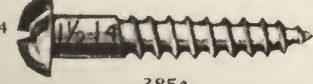
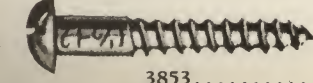
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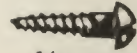
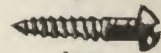
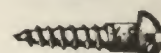
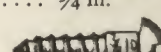
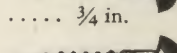
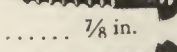
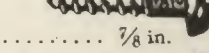
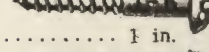
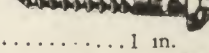
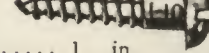
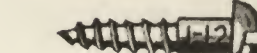
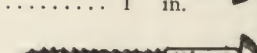
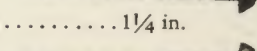
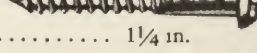
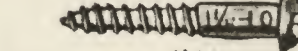
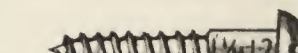
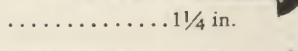


Brass Wood Screws

Nickel Plated or Chrome

"N. P." designates Nickel Plate, "C" designates Chrome

3 1/2-14		3866..... 3 1/2 in.
3-14		3865..... 3 in.
3-10		3864..... 3 in.
2 1/2-14		3863..... 2 1/2 in.
2 1/2-12		3862..... 2 1/2 in.
2 1/2-10		3861..... 2 1/2 in.
2-14		3860..... 2 in.
2-12		3859..... 2 in.
2-10		3858..... 2 in.
1 3/4-14		3857..... 1 3/4 in.
1 3/4-12		3856..... 1 3/4 in.
1 3/4-10		3855..... 1 3/4 in.
1 1/2-14		3854..... 1 1/2 in.
1 1/2-1		3853..... 1 1/2 in.

3836..... 5/8 in.		3/8-6
3837..... 3/4 in.		3/4-6
3838..... 3/4 in.		3/4-8
3839..... 3/4 in.		3/4-10
3840..... 7/8 in.		7/8-8
3841..... 7/8 in.		7/8-10
3842..... 1 in.		1-6
3843..... 1 in.		1-8
3844..... 1 in.		1-10
3845..... 1 in.		1-12
3846..... 1 1/4 in.		1 1/4-6
3847..... 1 1/4 in.		1 1/4-8
3848..... 1 1/4 in.		1 1/4-10
3849..... 1 1/4 in.		1 1/4-12
3850..... 1 1/2 in.		1 1/2-6
3851..... 1 1/2 in.		1 1/2-8
3852..... 1 1/2 in.		1 1/2-10

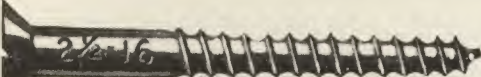
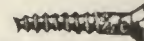
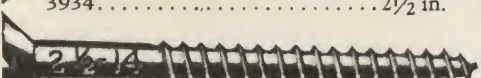
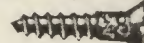
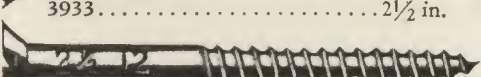
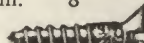
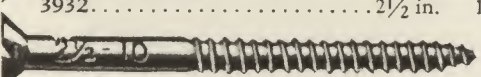
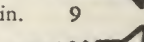
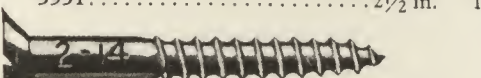
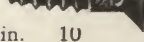
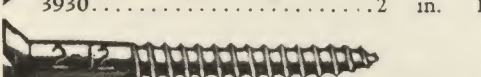
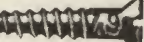
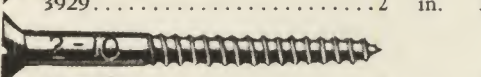
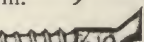
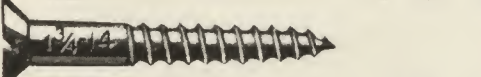
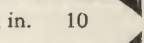
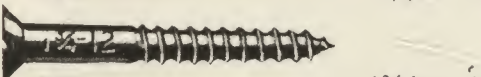

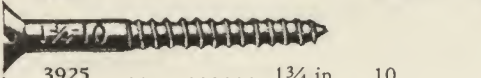
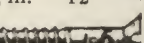
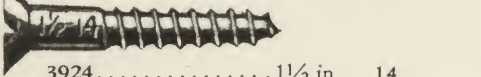
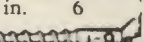
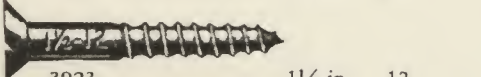
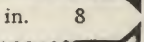
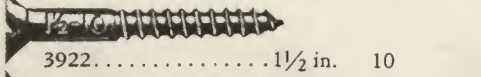
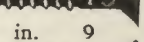
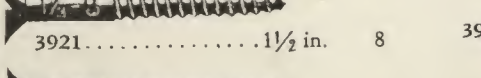
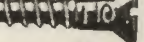
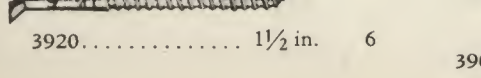

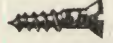

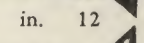
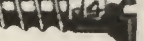


Woodward Wanger Co.



Flat Head Bright Steel Screws

ILLUSTRATIONS ACTUAL SIZE

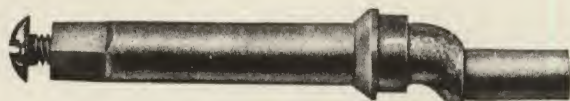
 2 1/2-16 3934..... 2 1/2 in. 16	 3903.... 3/4 in. 6	3/4-6
 2 1/2-14 3933..... 2 1/2 in. 14	 3904.... 3/4 in. 8	3/4-8
 2 1/2-12 3932..... 2 1/2 in. 12	 3905..... 3/4 in. 9	3/4-9
 2 1/2-10 3931..... 2 1/2 in. 10	 3906..... 3/4 in. 10	3/4-10
 2-14 3930..... 2 in. 14	 3907..... 7/8 in. 9	7/8-9
 2-12 3929..... 2 in. 12	 3908..... 7/8 in. 10	7/8-10
 2-10 3928..... 2 in. 10	 3909..... 7/8 in. 12	7/8-12
 1 3/4-14 3927..... 1 3/4 in. 14	 3910..... 1 in. 6	1-6
 1 3/4-12 3926..... 1 3/4 in. 12	 3911..... 1 in. 8	1-8
 1 3/4-10 3925..... 1 3/4 in. 10	 3912..... 1 in. 9	1-9
 1 1/2-14 3924..... 1 1/2 in. 14	 3913..... 1 in. 10	1-10
 1 1/2-12 3923..... 1 1/2 in. 12	 3914..... 1 in. 12	1-12
 1 1/2-10 3922..... 1 1/2 in. 10	 3915..... 1 in. 14	1-14
 1 1/2-8 3921..... 1 1/2 in. 8	 3916..... 1 1/4 in. 8	1 1/4-8
 1 1/2-6 3920..... 1 1/2 in. 6	 3917..... 1 1/4 in. 10	1 1/4-10
	 3901... 1/2 in. 6	1/2-6
	 3902... 5/8 in. 7	5/8-7
	 3918..... 1 1/4 in. 12	1 1/4-12
	 3919..... 1 1/4 in. 14	1 1/4-14



Woodward Wanger Co.



Fuller Repairs

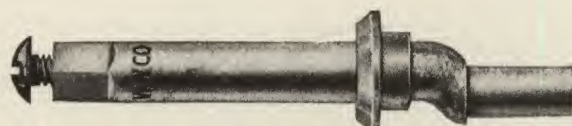


Nos. 3990-3991

Fuller Eccentrics

CAST BRASS, NICKEL PLATED

No.	Size	Requires Hole in Stem
3990.....	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
3991.....	$\frac{1}{2}$ in.	$\frac{3}{8}$ in.



Nos. 3993-3995

Fuller Eccentrics

(EXTRA WIDE FLANGE)

CAST BRASS, NICKEL PLATED

No.	Size	Requires Hole in Stem
3993.....	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
3995.....	$\frac{1}{2}$ in.	$\frac{3}{8}$ in.

Adjustable Fuller Stems

Accurately Machined

These stems can be adjusted to fit any Fuller Faucet. All stems are fitted with Genuine Enduro Fuller Balls and solid brass Fuller Stem Caps.

No.	Size of Fuller Ball	Hole in Stem
4003.....	$\frac{3}{8}$ in.	$\frac{3}{8}$ in.
4004.....	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.
4006.....	$\frac{1}{2}$ in.	$\frac{3}{8}$ in.
4007.....	$\frac{1}{2}$ in.	$\frac{1}{4}$ in.
4009.....	$\frac{5}{8}$ in.	$\frac{3}{8}$ in.
4010.....	$\frac{5}{8}$ in.	$\frac{1}{4}$ in.
4012.....	$\frac{3}{4}$ in.	$\frac{3}{8}$ in.
4013.....	$\frac{3}{4}$ in.	$\frac{1}{4}$ in.



Nos. 4003-4013

Copper Fuller Caps

ACCURATE SIZES

No.	Size
4014.....	$\frac{3}{8}$ in.
4015.....	$\frac{1}{2}$ in.
4016.....	$\frac{5}{8}$ in.
4017.....	$\frac{3}{4}$ in.
4018.....	$\frac{1}{2}$ in.
4019.....	$\frac{3}{4}$ in.



Nos. 4014- 4019.



Woodward Wanger Co.



Threaded Collars and Trap Bushings

Brass Trap Collars

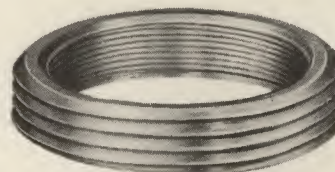
I. P. Thread Outside, Reamed to Solder



No.	Threaded	Reamed for Tube
4035	.....1 1/4"	1 1/4" O. D.
4037	.....1 1/2"	1 1/4" O. D.
4038	.....1 1/2"	1 3/8" O. D.
4039	.....1 1/2"	1 1/2" O. D.

Brass Trap Collars

I. P. Thread Outside, Fine Thread Inside

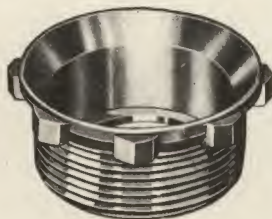


No.	Threaded	Tapped
4040	.....1 1/4" I. P.	1 1/4" F. T.
4042	.....1 1/2" I. P.	1 1/4" F. T.
4044	.....1 1/2" I. P.	1 1/2" F. T.

Trap Bushings

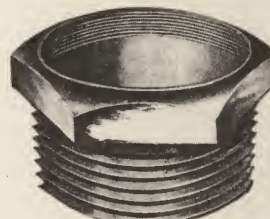
For Connecting Brass Tubing to Iron Pipe

To Solder Tube, Male



No.	I. P. Thread Outside	Inside Reamed for Tube
4100	.....1 1/4"	1 1/4" O. D.
4102	.....1 1/2"	1 1/4" O. D.
4103	.....1 1/2"	1 3/8" O. D.
4104	.....1 1/2"	1 1/2" O. D.

I. P. Thread Outside, Fine Thread Inside



No.	I. P. Thread Outside	Tapped
4109	.....1 1/4"	1 1/4" F. T.
4113	.....1 1/2"	1 1/2" F. T.

TO SOLDER TUBE, FEMALE



No.	I. P. Thread Inside	Inside Reamed for Tube
4117	.....1 1/4"	1 1/4" O. D.
4119	.....1 1/2"	1 1/4" O. D.
4120	.....1 1/2"	1 3/8" O. D.
4121	.....1 1/2"	1 1/2" O. D.

Lead Pipe to Iron Pipe, Male
Bell Mouth Pattern



No.	I. P. Thread Outside	Inside Reamed for Lead Pipe
4114	.....1 1/4"	1 1/4"
4116	.....1 1/2"	1 1/2"
4116A	.....2"	2"



Woodward Wanger Co.



Slip Joint Nuts

Supplied with Brass Friction Rings and Rubber Slip Joint Washers

—CAST BRASS—



Nos. 4054-4059

Catalog Numbers and
Finish

Sizes Tapped
for I. P. Thread

	Reamed for	Rough Brass	Nickel Plated	Chrome
1 1/4"	1 1/4" O. D. Tube	No. 4054-R	No. 4054 N. P.	No. 4054-C
1 1/2"	1 1/2" O. D. Tube	No. 4055-R	No. 4055 N. P.	No. 4055-C
1 3/4"	1 3/4" O. D. Tube	No. 4056-R	No. 4056 N. P.	No. 4056-C
1 1/2"	1 3/8" O. D. Tube	No. 4057-R	No. 4057 N. P.	No. 4057-C
1 1/2"	1 1/2" O. D. Tube	No. 4058-R	No. 4058 N. P.	No. 4058-C
2"	2" O. D. Tube	No. 4059-R	No. 4059 N. P.	No. 4059-C

Slip Joint Nuts

For Supply Pipes. Furnished with Brass
Friction Rings, and Rubber Slip Joint Washers



Nos. 4065 to 4071

CAST BRASS

Tapped for
I. P. Thread

Reamed for	Nickel Plated	Chrome
3/8" 1/2" I. P. Size	No. 4065 N. P.	No. 4065-C
1/2" 3/4" I. P. Size	No. 4066 N. P.	No. 4066-C
3/4" 1" I. P. Size	No. 4067 N. P.	No. 4067-C
3/8" 7/16" O. D. Tubing	No. 4068 N. P.	No. 4068-C
1/2" 1/2" O. D. Tubing	No. 4069 N. P.	No. 4069-C
1/2" 1/2" O. D. Tubing	No. 4070 N. P.	No. 4070-C
1/2" 9/16" O. D. Tubing	No. 4071 N. P.	No. 4071-C

TRAP NUTS
CAST BRASS



See Numbers 4054,
4056 and 4058



Woodward Wanger Co.



Ground Joint Connections

For Connecting Waste and Vent Tubes to Iron Pipe.

A Brass Ground Joint — No Packing — Adjustable but not a Slip Joint.



Female—Plain Brass

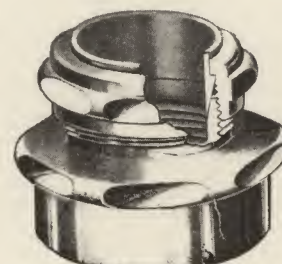
No.	Body Tapped	Slip Joint for
4081	...1 1/4" I. P.	1 1/4" O. D. Tube
4082	...1 1/2" I. P.	1 1/2" O. D. Tube
4083	...1 3/4" I. P.	1 3/4" O. D. Tube
4084	...1 1/2" I. P.	1 1/2" O. D. Tube



Female—With N. P. or Chrome Nut and Plain Brass Body

No.	Body Tapped	Slip Joint for
4073	...1 1/4" I. P.	1 1/4" O. D. Tube
4074	...1 1/2" I. P.	1 1/2" O. D. Tube
4075	...1 3/4" I. P.	1 3/4" O. D. Tube
4076	...1 1/2" I. P.	1 1/2" O. D. Tube

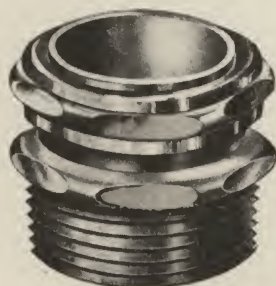
If wanted in Chrome, add "C" to Catalog Number.



Female—With N. P. or Chrome Nut and Body

No.	Body Tapped	Slip Joint for
4090	...1 1/4" I. P.	1 1/4" O. D. Tube
4091	...1 1/2" I. P.	1 1/2" O. D. Tube
4092	...1 3/4" I. P.	1 3/4" O. D. Tube
4093	...1 1/2" I. P.	1 1/2" O. D. Tube

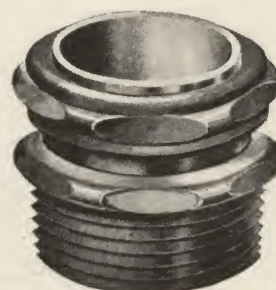
If wanted in Chrome, add "C" to Catalog Number.



Male—With N. P. or Chrome Nut and Plain Brass Body

No.	Body Threaded	Slip Joint for
4077	.....1 1/4" I. P.	1 1/4" O. D. Tube
4078	.....1 1/2" I. P.	1 1/2" O. D. Tube
4079	.....1 3/4" I. P.	1 3/4" O. D. Tube
4080	.....1 1/2" I. P.	1 1/2" O. D. Tube

If wanted in Chrome, add "C" to Catalog Number.



Male—Plain Brass

No.	Body Threaded	Slip Joint for
4085	.....1 1/4" I. P.	1 1/4" O. D. Tube
4086	.....1 1/2" I. P.	1 1/2" O. D. Tube
4087	.....1 3/4" I. P.	1 3/4" O. D. Tube
4089	.....1 1/2" I. P.	1 1/2" O. D. Tube

Connecting Traps with a solder bushing, or jam nut is old fashioned.

There is a much better way. Screw the body of the above couplings into the fitting; slip the coupling nut and double ground joint, over the outlet of the trap, screw together, and you have a perfect air, liquid and gas type connection.

It is impossible to move this connection without loosening the coupling nut.

Being all metal, makes a much superior joint to coupling nuts where rubber gaskets are used to seal. These rot

and disintegrate in time, while the all brass feature of these couplings is practically perpetual when properly used.

Should the trap become stopped with lint, hair or other insoluble waste matter, simply remove the coupling nut at the connection and lavatory waste. This enables you to remove the trap for visible, perfect cleaning, and eliminate the necessity of lying on your back and attempting to hook the stoppage with a wire through the cleanout.



Woodward Wanger Co.



Slip Joint Connections

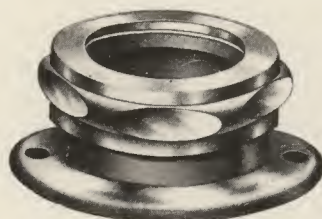
Brass, Nickel Plated and Chrome



Trap Slip Joint for
Lead Pipe Waste

For Basin and Bath Supply Pipes

No.	Threaded for	Slip Joint for
4127	$\frac{3}{8}$ " I. P.	$\frac{9}{16}$ " O. D. Tube
4129	$\frac{1}{2}$ " I. P.	$\frac{21}{32}$ " O. D. Tube or $\frac{3}{8}$ " I. P. Size Tube



No. 4125

No.	Reamed for	Slip Joint for
4125-N. P.	$1\frac{1}{4}$ " lead pipe	$1\frac{1}{4}$ " O. D. Tube
4125-C	$1\frac{1}{4}$ " lead pipe	$1\frac{1}{4}$ " O. D. Tube

For Connecting Lead Pipe Waste to Brass Tube, Traps, etc. Cast Flange can be securely screwed to the Floor or Wall.

Brass Slip Joints for
Iron Pipe



No. 4086

No.	Nipple Threaded	Slip Joint for
4086-N. P.	$1\frac{1}{4}$ " I. P.	$1\frac{1}{4}$ " O. D. Tube
4086-R	Same	All Rough Nickel
4086-C	Same	With Chromium Plated Brass Nut

For connecting waste and vents of traps, etc., to Iron Pipe. Includes Brass Nipple, Brass Slip Joint Nut, Brass Friction Ring, and Rubber Slip Joint Washer.

Bath and Basin Supply Pipe Connections

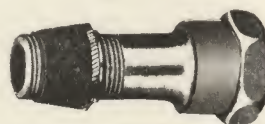
For Bath Supply



With
Nut

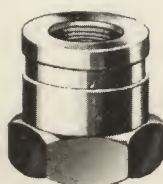
No.	Tapped	Finish
4145-R	$\frac{3}{8}$ " I. P.	Rough Nickel
4146-R	$\frac{1}{2}$ " I. P.	Rough Nickel

For Bath Supply



No.	Tapped	Finish
4143-R	$\frac{3}{8}$ " I. P.	Rough Nickel
4144-R	$\frac{1}{2}$ " I. P.	Rough Nickel

Basin Supply Couplings



Rough Nickel and
Polished Chrome

No.	Size
4139-R	$\frac{3}{8}$ " I. P. x $\frac{1}{4}$ " I. P.
4139-C	$\frac{3}{8}$ " I. P. x $\frac{1}{4}$ " I. P.
4140-R	$\frac{1}{2}$ " I. P. x $\frac{1}{4}$ " I. P.
4140-C	$\frac{1}{2}$ " I. P. x $\frac{1}{4}$ " I. P.

Brass Collar for
Tank Supply



No.	Size
4030-N. P.	$\frac{25}{32}$ " O. D. x $\frac{5}{32}$ " Thick Tapped $\frac{3}{8}$ " I. P.
4030-C	Same in Chrome.



Woodward Wanger Co.



Flanges

Heavy Brass—Nickel Plated or Chrome

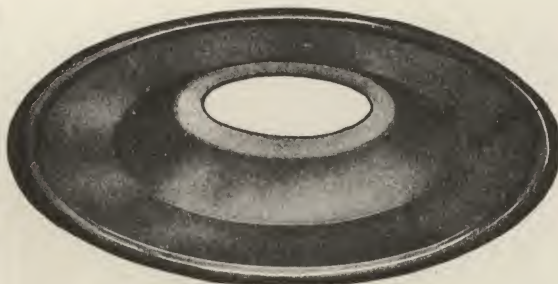
No.	Diameter	Hole to Fit
4149	21½"	1½" Faucet

If wanted in "Chrome" add "C" to the Catalog Number.



No. 4149

Raised Faucet Flange



Nos. 4151-4152

NICKEL PLATED OR CHROME

No.	Dia. at Base	Hole to Fit
4151	3"	½" Faucet
4152	3"	5⁄8" and ¾" Faucet

If wanted in "Chrome" add "C" to the Catalog Number.

Closet Spud Flanges

Nickel Plated or Chrome



No. 4171

No.	Size	Diam. at Base	Height
4171.....	2 in.	3½ in.	¾ in.

If wanted in "Chrome" add "C" to Catalog Number.

Durham Flanges with Spring Holder

Heavy Brass, Nickel Plated or Chrome



Nos. 4163-4164

No.	Dia. at Base	Height	Hole to Fit
4163	3"	1⅞"	1¼" O. D. Tube
4164	3"	1⅞"	1½" O. D. Tube

If wanted in "Chrome" add "C" to Catalog Number.

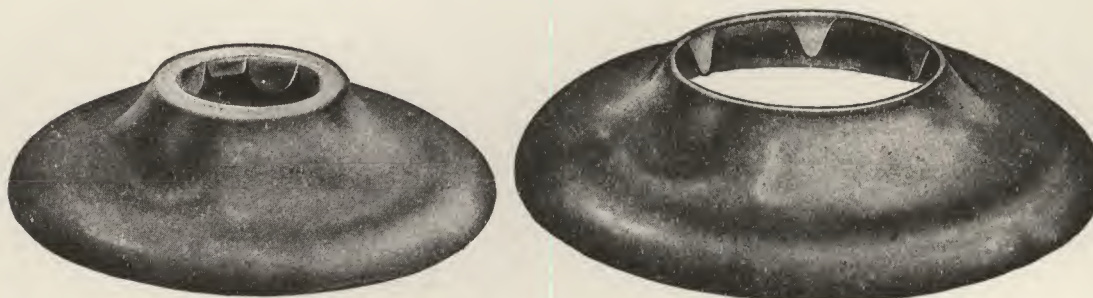


Woodward Wanger Co.



Flanges

Heavy Brass, Nickel Plated or Chrome



Nos. 4777-4196

With Sure-Grip Spring Holders

HOLE FOR IRON PIPE SIZES

No.	Hole for	Diam. at Base
4177.....	$\frac{3}{8}$ in. I. P.	2½ in.
4178.....	$\frac{1}{2}$ in. I. P.	2½ in.
4179.....	$\frac{3}{4}$ in. I. P.	3 in.
4181.....	1¼ in. I. P.	3½ in.
4182.....	1½ in. I. P.	3½ in.

If wanted in "Chrome" add "C" to the Catalog Number.

HOLE FOR TUBING SIZES

No.	Hole for	Diam. at Base
4188.....	$\frac{7}{8}$ in. O. D. Tube	2½ in.
4189.....	$\frac{1}{2}$ in. O. D. Tube	2½ in.
4190.....	$\frac{9}{16}$ in. O. D. Tube	2½ in.
4191.....	$\frac{5}{8}$ in. O. D. Tube	2½ in.
4192.....	$\frac{3}{4}$ in. O. D. Tube	2½ in.
4193.....	1 in. O. D. Tube	3 in.
4194.....	1¼ in. O. D. Tube	3 in.
4195.....	1½ in. O. D. Tube	3 in.
4196.....	1¾ in. O. D. Tube	3 in.

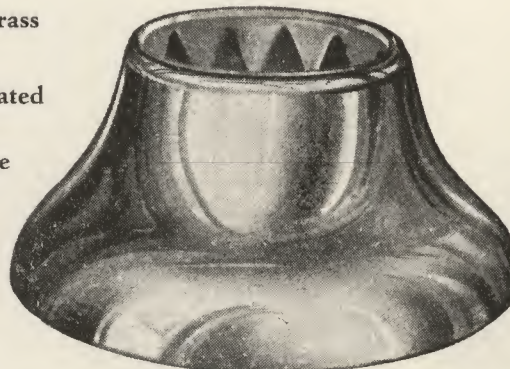
Extra Deep Flange
With Sure-Grip Spring Holder



Nos. 4200-4225

Heavy Brass

Nickel Plated
or
Chrome



Nos. 4165-4166

HOLE FOR IRON PIPE

No.	Height	Hole for	Dia. at Base
4200....	1¼"	$\frac{3}{8}$ " I. P.	2¾"
4201....	1¼"	$\frac{1}{2}$ " I. P.	2¾"
4225....	1¼"	$\frac{9}{16}$ " Tube	2¾"

If wanted in "Chrome" add "C" to Catalog Number.

HOLE FOR TUBING

No.	Height	Hole for	Dia. at Base
4165....	1½"	1¼" Tube	3"
4166....	1½"	1½" Tube	3"

If wanted in "Chrome" add "C" to Catalog Number.



Woodward Wanger Co.



Hose Fittings

Galvanized Hose Clamps For 3-Ply Hose



Nos. 4363-4365

No. 4363	.....	Size $1\frac{1}{2}$ "
No. 4364	.....	Size $\frac{5}{8}$ "
No. 4365	.....	Size $\frac{3}{4}$ "

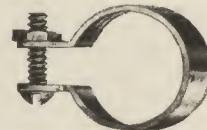
Female Parts Only



Nos. 4379-4380

No.		Size
4379	.....	$1\frac{1}{2}$ "
4380	.....	$\frac{3}{4}$ "

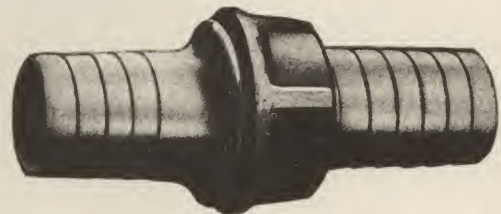
Small Hose Clamp N. P. For Beer and Air Hose



Nos. 1580-1581

No. 1580	.....	for Hose $\frac{3}{4}$ " O. D.
No. 1581	.....	for Hose $1\frac{1}{2}$ " O. D.

Brass Hose Couplings

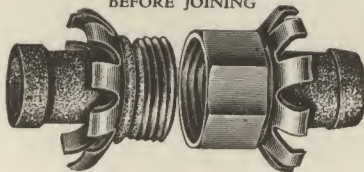


Nos. 4377-4378

No.		Size
4377	.....	$1\frac{1}{2}$ "
4378	.....	$\frac{3}{4}$ "

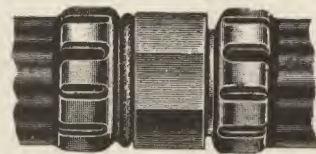
Clincher Hose Couplings

BEFORE JOINING



No.		Size
4381	.....	$1\frac{1}{2}$ "
4382	.....	$\frac{3}{4}$ "
4383	.....	$\frac{5}{8}$ "

AFTER JOINING



Clincher Hose Mender

BEFORE JOINING



No.		Size
4387	.....	$1\frac{1}{2}$ "
4388	.....	$\frac{3}{4}$ "
4389	.....	$\frac{5}{8}$ "

AFTER JOINING



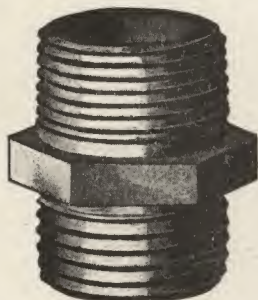


Woodward Wanger Co.



Hose Fittings

Male



Nos. 4397-4398

No.	Hose Thread	I. P. Thread
4397	3/4"	1/2"
4398	3/4"	3/4"

BRASS HOSE NIPPLES

Male and Female



Nos. 4399-4400

No.	Hose Thread	I. P. Thread
4399	3/4"	1/2"
4400	3/4"	3/4"

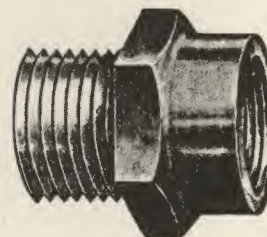
Double Female



Nos. 4401-4402

No.	Hose Thread	I. P. Thread
4401	3/4"	1/2"
4402	3/4"	3/4"

Male and Female



Nos. 4403-4404

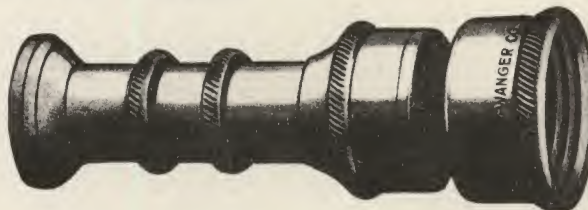
WITH REVERSE THREADS

No.	I. P. Thread	Hose Thread
4403	1/2"	3/4"
4404	3/4"	3/4"

Hose Nozzle

Sturdily built of Cast Brass. The Discharge Openings in the Stem have a Clear, Full Waterway. No Drip. No Back Spray. Quickly adjusted, to produce various sprays.

No. 4410 3/4"



No. 4410

* HOSE WASHERS—SEE PAGE 51 RUBBER AND FIBRE SECTION.

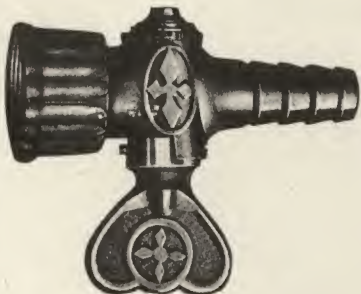


Woodward Wanger Co.



Gas Fittings

— BRASS —



Nos. 4426-4429

Hose Cocks

No.	Size
4426	1/4" Female
4427	3/8" Female
4428	1/2" Female
4429	3/4" Female



No. 4437

Independent Cocks

No.	Size
4437	3/8"



Nos. 4431-4433

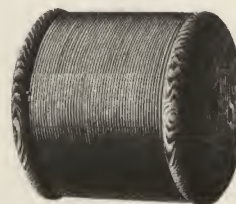
"L" Burner Cocks

No.	Size
4431	1/4"
4432	3/8"
4433	1/2"

Copper Wire

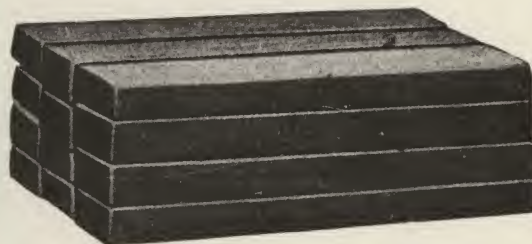
Soft Copper Wire for Plumbers. In 5 lb. Spools

Number	4448	4449	4449 1/2
Gauge	12	14	16



Gas Fitters Cement

No. 4447per pound



No. 4447

Sink Collars



No. 4345

Cast Iron Sink Collars

No.	REGULAR	Description
4345		Plain Iron



Nos. 4350-4351

Cast Iron Sink Collars

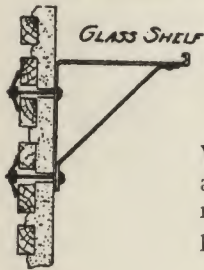
No.	Tapped	Description
4350	1 1/4 in. I. P.	Plain Iron
4351	1 1/2 in. I. P.	Plain Iron



Woodward Wanger Co.



PLASTER ON WOOD LATH



TOWEL RACK

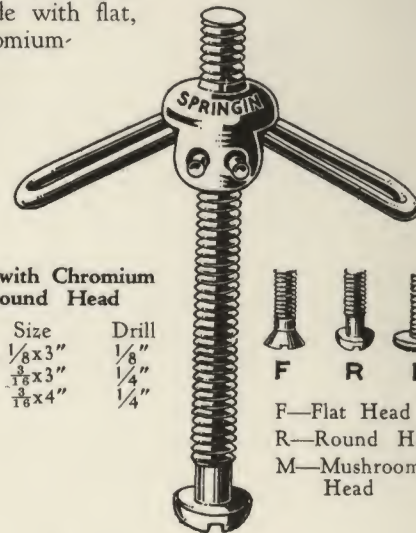


PLASTER ON METAL LATH

Spring-In Toggle Bolts

CADMIUM PLATED—RUST PROOF

Wings fold down to push through opening. As soon as they are through the hole they spring open. Made with flat, round or mushroom head. Brass screws with chromium-plated heads supplied only with round heads.



Cadmium Plated

No.	Diam. & Length of Screw	Drill Required
4480	$\frac{1}{8}$ x 3"	$\frac{3}{8}$ "
4481	$\frac{1}{8}$ x 4"	$\frac{3}{8}$ "

In Flat and Mushroom Head Only

4482	$\frac{3}{16}$ x 3"	$\frac{1}{2}$ "
4483	$\frac{3}{16}$ x 4"	$\frac{1}{2}$ "

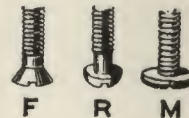
In Round and Flat Heads Only

4484	$\frac{1}{4}$ x 3"	$\frac{5}{8}$ "
4485	$\frac{1}{4}$ x 4"	$\frac{5}{8}$ "
4486	$\frac{1}{4}$ x 6"	$\frac{5}{8}$ "

In Round and Flat Head

Brass Screw with Chromium Plated Round Head

No.	Size	Drill
4487	$\frac{1}{8}$ x 3"	$\frac{1}{8}$ "
4488	$\frac{3}{16}$ x 3"	$\frac{1}{4}$ "
4489	$\frac{3}{16}$ x 4"	$\frac{1}{4}$ "



F—Flat Head
R—Round Head
M—Mushroom Head

Steel Toggle Bolts

CADMIUM PLATED



Nos. 4452-4458.

WITH STEEL SCREW

No.	$\frac{3}{8}$ in. Diameter	Length of Screw
4452		3 in.
4453		4 in.
4454		5 in.

No.	$\frac{1}{4}$ in. Diameter	Length of Screw
4456		3 in.
4457		4 in.
4458		5 in.



Nos. 4460-4465.....

ROUND HEAD STEEL SCREW

No.	$\frac{3}{8}$ in. Diameter	Length of Screw
4460		3 in.
4461		4 in.

No.	$\frac{1}{4}$ in. Diameter	Length of Screw
4464		3 in.
4465		4 in.



Nos. 4468-4473...

FLAT HEAD STEEL SCREW

No.	$\frac{3}{8}$ in. Diameter	Length of Screw
4468		3 in.
4469		4 in.

No.	$\frac{1}{4}$ in. Diameter	Length of Screw
4472		3 in.
4473		4 in.

No. 4450— $\frac{1}{8}$ x 3" Flat Head for Sani-Set



Woodward Wanger Co.



Pipe Fittings—Pipe Holders

Galvanized Crossovers



Nos. 4525-4526

No.	Size
4525.....	1/2 in.
4526.....	3/4 in.

Pipe and Cable Hanger

The Key to the
Lock Joint



Adjustable to fit
any size of Pipe



No. 4650

Made from special tempered soft steel, extremely strong, yet easily twisted or bent by hand. Can be installed without the use of tools. Packed in box containing 12 yards of hanger with keys for fastening.

No. 4650.....3/4" wide, 20 gauge



WICK-PAC

Invented by a Plumber. Takes all the effort and annoyance out of wicking brass pipe threads. Conveniently spooled in a container with metal ends and this handy container fits snugly into the hand. Comes ready for use and the strands are of the highest grade cotton, in two sizes.

- No. 4715. Single strand, for pipes up to 3/4". Enough to wick 300 pipes 3/4". Fine
No. 4716. Single strand for pipes 1" and 2". Coarse

Brass Name Plates



No. 4727

BLACK LETTERS

To designate the use of Stops and Wastes.

No.
4727.....Dia. 1 1/2", 3/16" Hole

Galvanized Flat Washers



No. 4648

Chain Stay Washers

No.	Diameter	Diam. of Hole
4648	1 3/8"	5/16"



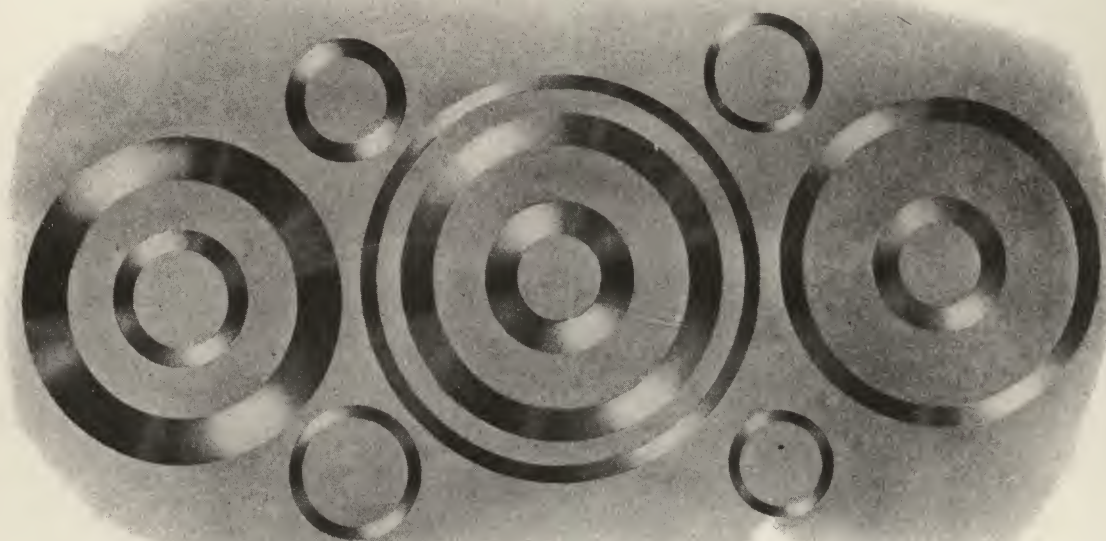
No. 4715



Woodward Wanger Co.



Brass Friction Rings



Nos. 4670-4693..

HOLE FOR TUBING SIZES

No.	Outside Diameter	To Slip Tube	To Fit Nut
4670.....	$\frac{9}{16}$ in.	$\frac{7}{16}$ in. O. D.	$\frac{3}{8}$ in. I. P. No. 4068
4671.....	$\frac{11}{16}$ in.	$\frac{7}{16}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4069
4672.....	$\frac{13}{16}$ in.	$\frac{1}{2}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4070
4673.....	$\frac{13}{16}$ in.	$\frac{7}{16}$ in. O. D.	$\frac{1}{2}$ in. I. P. No. 4071
4674.....	$1\frac{1}{2}$ in.	$1\frac{1}{4}$ in. O. D.	$1\frac{1}{4}$ x $1\frac{1}{4}$ in. No. 4054
4675.....	$1\frac{1}{2}$ in.	$1\frac{3}{8}$ in. O. D.	$1\frac{1}{4}$ x $1\frac{3}{8}$ in. No. 4055
4676.....	$1\frac{3}{4}$ in.	$1\frac{1}{4}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{1}{4}$ in. No. 4056
4677.....	$1\frac{3}{4}$ in.	$1\frac{3}{8}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{3}{8}$ in. No. 4057
4678.....	$1\frac{3}{4}$ in.	$1\frac{1}{2}$ in. O. D.	$1\frac{1}{2}$ x $1\frac{1}{2}$ in. No. 4058
4679.....	$1\frac{15}{16}$ in.	$\frac{3}{8}$ in. I. P.	$\frac{3}{4}$ x $\frac{3}{8}$ in. No. 4072

FOR BASIN FAUCET AND ODD THREAD NUTS

No.	Outside Diameter	To Slip Tube	For Use With
4688.....	$\frac{31}{32}$ in.	$\frac{7}{16}$ in.	Basin Faucet Nut for 6536 Connection
4689.....	$\frac{31}{32}$ in.	$\frac{1}{2}$ in.	Basin Faucet Nut
4690.....	$\frac{13}{16}$ in.	$\frac{1}{2}$ in.	Ideal Float Valve (Ball Cock) Shank
4691.....	$\frac{13}{16}$ in.	$\frac{7}{16}$ in.	Ideal Float Valve (Ball Cock) Shank
4692.....	$2\frac{13}{16}$ in.	2 in.	Closet Elbow Nut
4693.....	$\frac{13}{16}$ in.	$\frac{3}{8}$ in. I. P.	Ball Cock Nut

ASSORTMENT BRASS FRICTION RINGS

No. 4694.....100 Assorted Rings

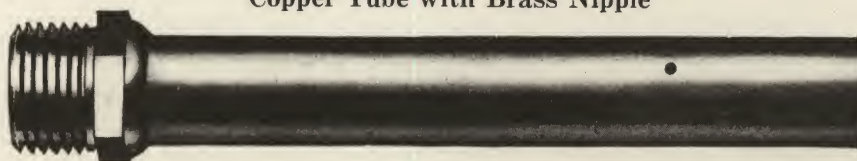


Woodward Wanger Co.



Copper Boiler Tubes

Copper Tube with Brass Nipple



Made of $\frac{5}{8}$ " O. D. Seamless Tubing, equipped with a Brass Rod Nipple, threaded $\frac{1}{2}$ " I. P. S. securely assembled to the tube. Tubes have same inside diameter as the standard $\frac{1}{2}$ " I. P. S. and are installed more quickly and with more economy than either regular $\frac{1}{2}$ " I. P. S. Brass Pipe or $\frac{1}{2}$ " I. P. S. Galvanized Iron Pipe.

No. 4770 Copper Boiler Tube—48" Long— $\frac{1}{8}$ " Vent Hole
No. 4771 Copper Boiler Tube—54" Long— $\frac{1}{8}$ " Vent Hole



Pacific Coast Slip Joint Elbow

Brass—Nickel Plated or Chrome

No.	Tapped for	Slip Joint for	Length Center to End
4750-N. P.	$\frac{1}{2}$ " I. P.	$\frac{1}{2}$ " O. D. Tube	2"
4750-C	$\frac{1}{2}$ " I. P.	$\frac{1}{2}$ " O. D. Tube	2"

Collars with Shoulder



No.	Tapped for
4751	$1\frac{1}{4}$ " O. D. Tube
4752	$1\frac{1}{2}$ " O. D. Tube

Stamped Collars for Solder Joint



No.	For	Diameter of Flange
4753	$1\frac{1}{4}$ " O. D. Tube	$1\frac{5}{8}$ " O. D.
4754	$1\frac{1}{2}$ " O. D. Tube	2" O. D.

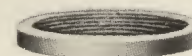
Bibb Ends

Cast Brass—Polished to Solder



No.	Size Bibb	Hose Thread	Diameter of Hole
4758	$\frac{1}{2}$ "	$\frac{3}{4}$ "	$\frac{11}{16}$ "
4759	$\frac{5}{8}$ "	$\frac{3}{4}$ "	$\frac{25}{32}$ "

Collars



No.	Tapped for
4755	$\frac{3}{8}$ " I. P. Size
4756	$1\frac{1}{4}$ " O. D. Tube
4757	$1\frac{1}{2}$ " O. D. Tube



Woodward Wanger Co.



Floor Drains

For Showers, Urinal Stalls, etc.



Nos. 4780-4781

Brass, Chromium Plated. The strainer is removable by loosening two screws.

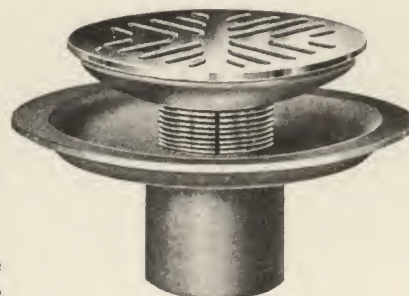
No.	Tapped	Diameter
4780	1½" I. P.	4½"
4781	2" I. P.	4½"

Floor Drain

Chrome Plated Removable Top

For tile, mosaic floors, or wherever there is a cement base, or for solid cement floors.

No.	Diameter of Strainer	Tapped for
4782	4½"	1½" I. P. Female
4783	4½"	2" I. P. Female



Nos. 4782-4783

The Adjustable Threaded Drain Plug which receives the Strainer is slotted so that if, through the settling of a building or any other cause, water should work down and around between the Waste Plug and the cement, it will be caught by the lower embedded pan and directed through the slots into the Outlet, thereby saving the ceiling and contents of room below the drain.



No. 4784

Ventilation Caps

Cast Iron—Painted Black

With Brass Set Screw

No. 4784for 4" Soil Pipe

Service Box Bolts

Brass—Pentagon Head



Nos. 4785-4786

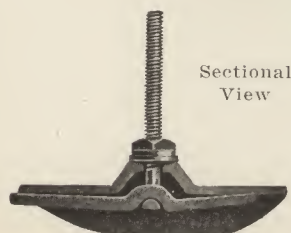
No. 4785	1½" Long	½ x 12 Thread
No. 4786	1¼" Long	9/16 x 12 Thread

Soil Pipe Menders

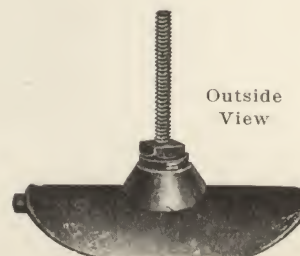
Brass Bolt and Iron Plate

Often saves cutting out a length of Soil Pipe in close places and can be used as a cleanout.

Number	4787	4788	4789
Size	2"	3"	4"



Sectional View



Outside View



Woodward Wanger Co.



Grease, Paste and Cement

Soldering Paste



No. 4838-4840

An article of high merit. It is efficient and economical. Our "Enduro" brand is highly recommended by our customers, many of whom have used it for years.

No.	Contents of Can
4838	2 ounces
4840	1 pound

Plumbers' Soil



No. 4900

Stands excessive heat and will not wipe off.

No. 4900 ½ lb. can

"Securo" Soil Pipe Cement



No. 4901

No. 4901 Box of one dozen sticks

Key Grease

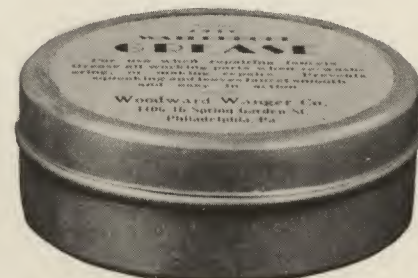


No. 4903

A perfect lubricant for ground key work.

No. 4903 2 ounce can

Waterproof Grease



No. 4916

For use when repairing faucets. Grease all working parts when rewashing or making repairs. Prevents squeaking and leaves the action of the faucet smooth and easy.

No. 4916 5 ounce can

Pure Tallow For Plumbers' Use



No. 4905

No. 4905 1 lb. can



Woodward Wanger Co.

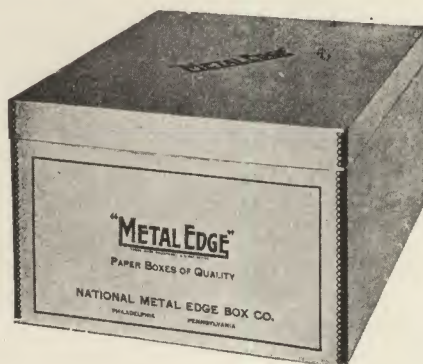


MODERN PACKAGING



We pack our best Faucet Washers in Lock Top Handy Tin Boxes. Top will not come off if dropped.

STRONG "METAL EDGE" BOXES



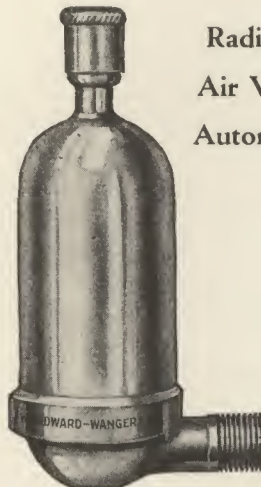
We have adopted the use of strong Metal Edged Boxes to protect W-W Quality Merchandise. This insures goods coming to you in good condition, and in boxes—looks good on your shelf.



Woodward Wanger Co.



Radiator Air Valves

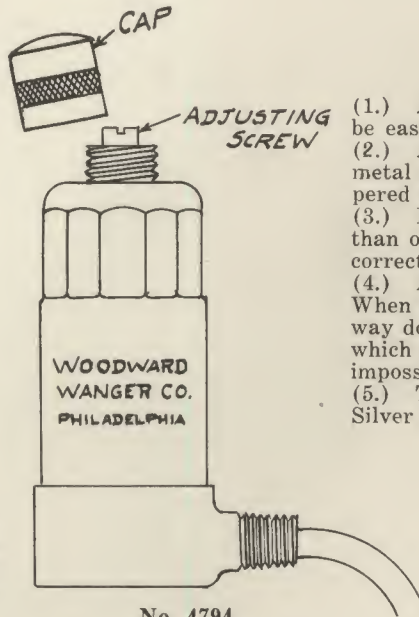


Radiator
Air Valve
Automatic

No. 4791

Well constructed. Positive automatic action and adjustment make this valve dependable under all conditions of expansion and contraction.

No.
4791Automatic Air Valve



Adjustable Air Port
Syphon Float Valve

No. 4794

- (1.) Adjusting screw permits System to be easily and quickly balanced.
- (2.) Adjusting screw is protected by metal cap. This prevents it being tampered with after setting.
- (3.) Radiators that get hot quicker than others (or not hot enough) may be corrected by adjusting the airport.
- (4.) Adjusting feature is fool-proof. When adjusting screw is turned all the way down, there is still a slight air hold, which permits the System to vent. It is impossible to screw the vent out.
- (5.) The valve is made with a Nickel Silver seat, which prevents corrosion.

(6.) The drain tube permits water in the valve to drain out without shaking or tapping.

(7.) Valves unconditionally "Guaranteed" for one year

(8.) Each valve individually boxed, packed 12 to a carton.

Air Valves

Radiator Air Valves



No. 4763

Regular Loose Key Pattern

No. 4763 1/8"

Extra Keys for No. 4763

No. 4765Key

Radiator Air Valves

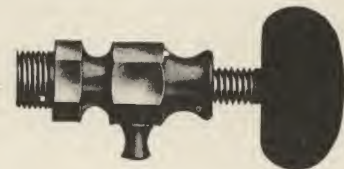


No. 4760

Coin Lock Screw Pattern

No. 4760 1/8"

Radiator Air Valves

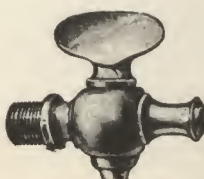


No. 4790

Regular Wood Wheel Pattern

No. 4790 1/8"

Brass Air Cocks



Finished in Red Steam Metal,
Tee Handles, Male Threads.

No.	Size
4773.....	1/8 in
4774.....	1/4 in
4775.....	3/8 in
4776.....	1/2 in.



Drain Valve

No. 4749

Male Thread 3/8" I. P.

No. 4749 1/2

Female 3/8" I. P.



Woodward Wanger Co.

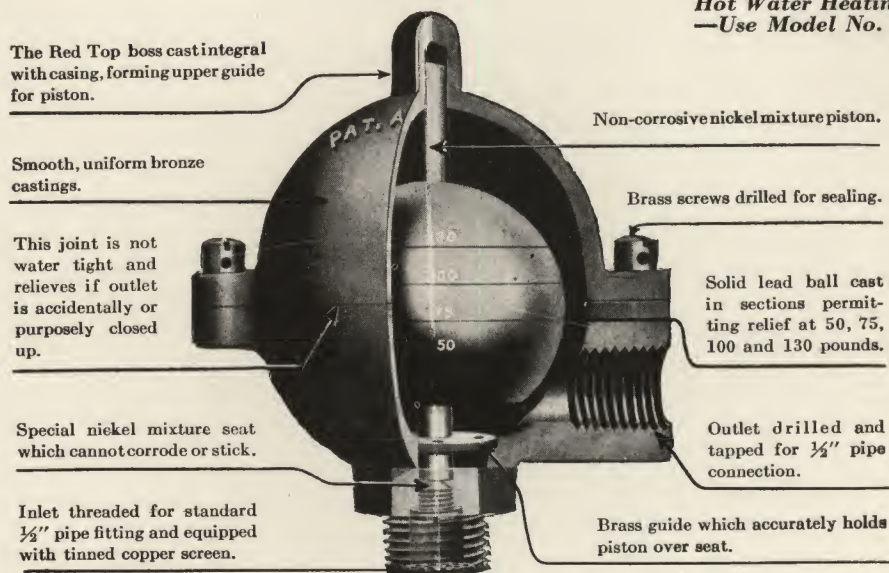


Red Top Relief Valve

For Domestic Hot Water System

Model No. 1

*Do not use this valve for
Hot Water Heating Systems
—Use Model No. 2 instead.*

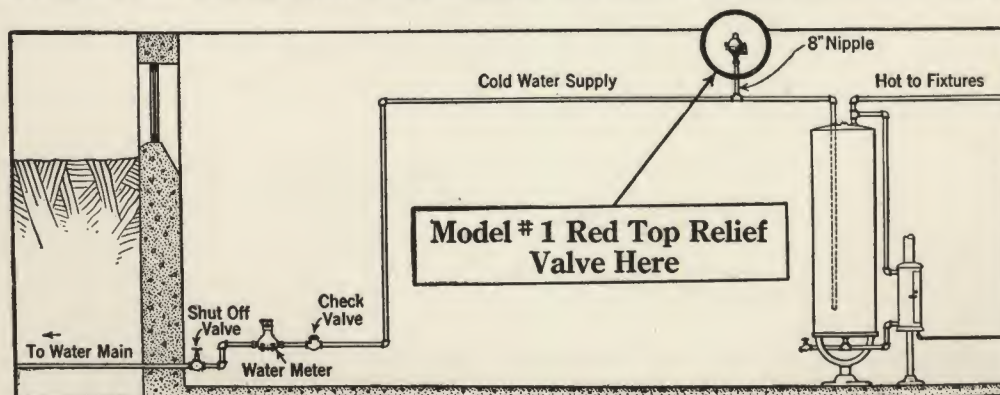


No. 4855

Model No. 1 Red Top Relief Valve is good insurance against exploding boilers. Look at the sectional view above and you will see why the Red Top is so dependable in action—made of non-corrosive metal throughout; no springs, levers, diaphragm, or other complicated parts. A special nickel mixture weighted piston, which operates on the gravity principle, is forced off the seat when pressure in system exceeds the pressure at which the valve is set.

Always responds in the emergency. No chance for this valve to jam, clog, stick, or otherwise get out of order. May be set to relieve at 50, 75, 100 and 130 pounds, simply by removing or adding sections of the lead ball which are plainly marked for pressures.

APPROVED—Model No. 1 Red Top Relief Valve is approved by the Underwriters Laboratories, Inc., and by State and Municipal Bureaus of Water and Boiler Inspection.



Always install in cold water line in a vertical position on horizontal line or section of pipe. Set valve at least 25 pounds higher than city water pressure.



Woodward Wanger Co.



Red Top Relief Valve For Hot Water Heating Systems

For Use with 1200 to 2000
Feet of Radiation.

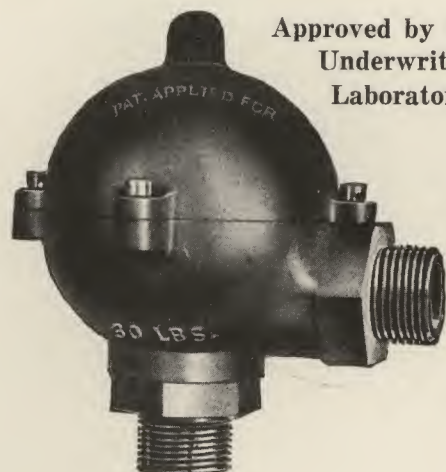
Model No. 2

Protection for hot water heating systems is provided by a Model No. 2 Red Top Relief Valve. There is no chance of a cracked boiler section when this valve protects the system. It gives instant relief at 30 pounds pressure. Made entirely of non-corrosive metal; no springs, levers, diaphragms, or other complicated parts. It operates on the dead-weight principle and is as dependable as the law of gravity itself.

Red Top "Tank-in-Basement" System of Hot Water Heating

An air-tight tank of any good make and a No. 2 Red Top Relief Valve are the only two special parts required for the most efficient, most economical system of hot water heating — and installed at the lowest cost.

Be sure to use the right model for the feet of radiation it must protect. See table below.



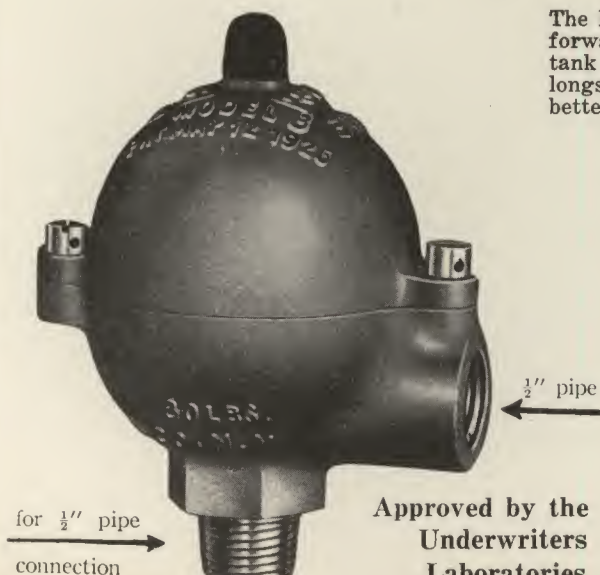
No. 4856

Approved by the
Underwriters
Laboratories

Model No. 2 Red Top Relief Valve is the same as Model No. 1, but larger in size and made with a solid lead ball which relieves at 30 pounds pressure.

Red Top—"Tank in Basement" Hot Water House Heating System

Model No. 3



No. 4857

Approved by the
Underwriters
Laboratories

The Red Top "Tank-in-Basement" System is a decided step forward in hot water heating. Not only is the expansion tank placed in the basement, near the heater where it belongs, but the system is "closed", so to speak, affording better and more uniform heat. The water expansion is taken care of by an air cushion in the tank which is air-tight. The pressure created in the system causes a more rapid circulation of hot water, and water in returning to the boiler is of higher temperature than in the open system and is more quickly reheated, thus effecting a saving in fuel consumed.

Due to rapid circulation smaller piping may be used if desired, and a fair amount saved in cost. The only additional equipment required over the open tank system is the Red Top Relief Valve. The gauge and thermometer are the same; so is the tank which, however, must be air-tight. A tank of any manufacture may be used, but its size should be governed by the following table:

For use with Model No. 3 Red Top:
15 gal. Tank.....up to 500 ft. Radiation
21 " "500 to 800 ft. "
26 " "800 to 1200 ft. "

Tank must be air-tight.

Note: From 1200 ft. to 2000 ft. Radiation use Model No. 2.



Woodward Wanger Co.



Relief Valves

Pop Safety Valve

Cast Brass with Semi-finished Bonnet



Nos. 4866 - 4869C

Equipped with testing Lever. A. S. M. E. Standard Specifications, set to relieve at 15 lbs. pressure.

Tested under actual steam conditions.

Operates to relieve pressure above 15 lbs. in steam House Heating Systems. Insert directly in the top of Boiler.

Catalog Number4866 4867 4868 4869A 4869B 4869C
Sizes $\frac{1}{2}$ " $\frac{3}{4}$ " 1" $1\frac{1}{4}$ " $1\frac{1}{2}$ " 2"

Diaphragm Pressure Relief Valve

Nos. 4850-4851

This valve acts automatically to release any increase in water volume due to expansion under closed heating conditions. In addition it can be opened manually for testing or flushing, by the test lever.

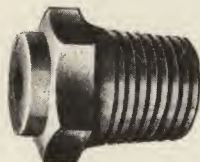
No. 4850— $\frac{1}{2}$ " I. P. S.—Cannot be set to relieve at higher pressure than that at which it is stamped. The limit setting is 160 lbs. (A. S. M. E. Standard.) If pressure setting is desired below that at which valve is marked, turn Hex adjusting Nut (right under testing lever), counter clockwise until water begins to drip out of the relief outlet. Then turn Hex adjusting nut clockwise until the dripping stops.

No. 4851— $\frac{1}{2}$ " I. P. S.—This valve is standard for Hot Water Heating systems and is factory set to release at 30 pounds pressure per square inch, the maximum pressure setting of the valve.



Nos. 4850-4851

Vacuum Breaker

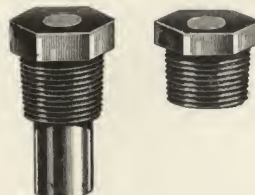


No. 4872

Insert in Hot or Cold Water line close to domestic Hot Water Boiler, and it will break any vacuum. Recommended especially where Copper Boilers are used. Break the line and insert tee.

No. 4872 $\frac{1}{2}$ " I. P.

Fusible Plugs



Fusible Plugs should be installed with the small end of the Banca tin exposed to the direct passage of the fire or gases. Do not use the plugs inside a steam drum, etc., where the temperature of the steam is used as a fusing agent.

The Style	To Insert	Pressure to	$\frac{3}{4}$ " I.P.T.	$\frac{1}{2}$ " I.P.T.	$\frac{3}{4}$ " I.P.T.	1" I.P.T.	$1\frac{1}{4}$ " I.P.T.	$1\frac{1}{2}$ " I.P.T.
Short	Outside	30 lbs.	4844	4844A	4844B	4844C	4844D	4844E
Short	Inside	30 lbs.	4845	4845A	4845B	4845C	4845D	4844E
Long	Outside	175 lbs.	4846	4846A	4846B	4846C	4846D	4846E
Long	Inside	175 lbs.	4847	4847A	4847B	4847C	4847D	4847E



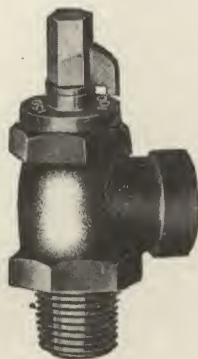
Woodward Wanger Co.



Relief Valves

All water Relief Valves tested under Hydraulic Pressure

Hextop Relief Valve with Adjustable Pressure Indicator

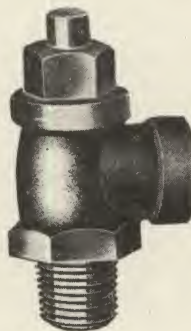


No. 4860

Can be regulated from 50 to 150 pounds. Cast Brass, $\frac{1}{2}$ " I. P. Install in Cold Water return line and pipe to drain if desired.

No. 4860 $\frac{1}{2}$ " I. P.

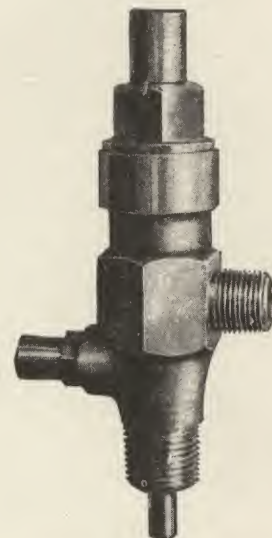
Combination Pressure and Vacuum Relief Valve



No. 4861

Made of rough Brass. Factory set for 125 lbs. Pressure Relief with built-in Vacuum Breaker device. Acts to relieve increases in pressure due to expansion of water in domestic Hot Water System. Vacuum acts to prevent collapse of Boiler in case of vacuum. Install in Cold Water return line and pipe to drain if desired.

No. 4861 $\frac{1}{2}$ " I. P.



Temperature Pressure Vacuum Relief Valve

For the protection of Domestic Hot Water Tanks heated by coal, oil, wood or electricity. Valves operate on patented Lovekin principle of the enclosed fuse. Strongly made and widely approved.

No. 4862 $\frac{3}{4}$ " I. P.

Spring Relief Valve

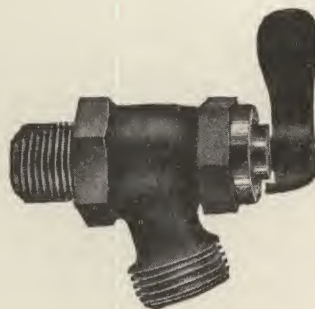


No. 4865

Constructed with an interior Phosphor Bronze Spring. Will not rust and not affected by atmospheric conditions. All other parts are brass. Hard fibre seat. Adjustable for all pressures, 35 lbs. to 150 lbs. Recommended for range boilers, tank in basement systems, storage systems, pumps, etc. Operates automatically when pressure becomes too great, drains the right amount of water to reduce pressure to within proper bounds and then automatically closes.

No. 4865A ... $\frac{1}{2}$ " No. 4865B ... $\frac{3}{4}$ "

Combination Boiler Drain and Pressure Relief Valve



Here we combine two essential Valves in one unit. The valve body is provided with a valve seat and hose connection outlet, much the same as an ordinary boiler drain cock. The valve is closed by spring action instead of a positive screw stem action. The indicator handle which opens or regulates the pressure adjustment is limited in travel so that in the shutoff position, pressure within the boiler or system is limited to 150 lbs. per square inch. A lower pressure setting may be had by turning the indicator handle to 100 lbs. or 50 lbs. as desired. The pressure spring is fixed to the valve stem so that a positive opening is assured for quick draining of the system when desired. The pressure at which the valve will automatically relieve is indicated by the handle on the dial of the bonnet.

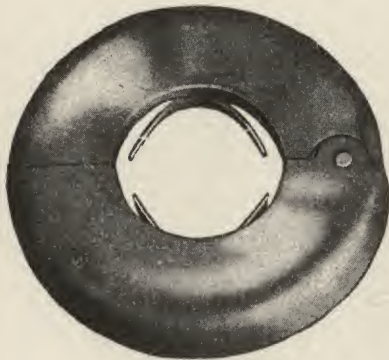
No. 4863 $\frac{1}{2}$ " I. P. S. Male Inlet x $\frac{3}{4}$ " Hose Outlet
No. 4864 $\frac{3}{4}$ " I. P. S. Male Inlet x $\frac{3}{4}$ " Hose Outlet



Woodward Wanger Co.



"Enduro" Floor and Ceiling Plates



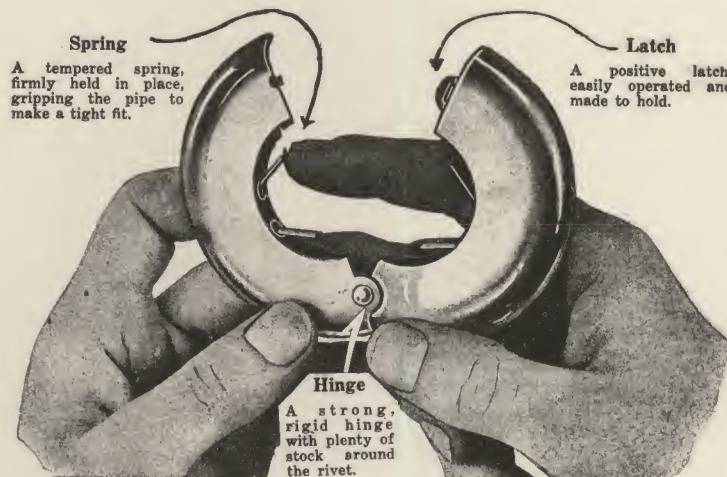
Nos. 4799-4821

Prong Type

Nickel Plated		Chrome Plated		Satin Finish	
No.	Size	No.	Size	No.	Size
4799-B	3/8"	4799-BC	3/8"	4810-B	3/8"
4800-B	1/2"	4800-BC	1/2"	4811-B	1/2"
4801-B	3/4"	4801-BC	3/4"	4812-B	3/4"
4802-B	1"	4802-BC	1"	4813-B	1"
4803-B	1 1/4"	4803-BC	1 1/4"	4814-B	1 1/4"
4804-B	1 1/2"	4804-BC	1 1/2"	4815-B	1 1/2"
4805-B	2"	4805-BC	2"	4816-B	2"
				4817	2 1/2"
				4818	3"
				4819	3 1/2"
				4820	4"
				4821	5"

For larger sizes see from No. 5017 on.
The larger sizes are Spring Type, however, and not Prong Type.

Spring Type



Polished Nickel Plate

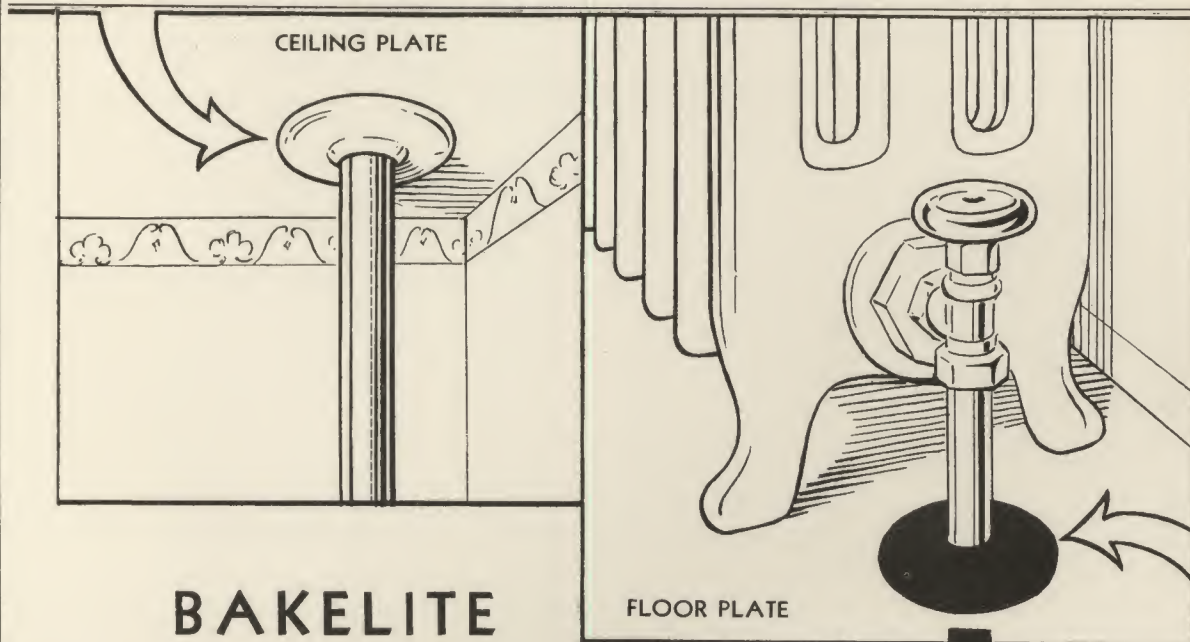
No.	Size
5010	3/8"
5011	1/2"
5012	3/4"
5013	1"
5014	1 1/4"
5015	1 1/2"
5016	2"
5017	2 1/2"
5018	3"
5019	3 1/2"
5020	4"

Polished Chrome Plate

No.	Size
5025	1/2"
5026	3/4"
5027	1"
5028	1 1/4"
5029	1 1/2"
5030	2"



Woodward Wanger Co.



BAKELITE Floor & Ceiling Plates

BAKELITE is the ideal material for floor and ceiling plates because any heat from pipes will not cause expansion and the opening of springs.

For this reason alone they are superior to metal plates. But there are other advantages. They will not peel, chip, rust, dent or discolor. They will not slide around on pipes. They grip tight and stay put.



Bakelite Plates have the advantage over metal plates in that they can be cleaned easily and quickly and kept bright and new looking. Just wipe them with a damp cloth.

OAK
WHITE
BLACK
IVORY

BAKELITE plates can be had in mottled oak, black, white and ivory, to permit more nearly matching the floor and ceiling.

No longer is there any excuse for soiled, rusted, dented or half-open plates to mar the appearance of a room. Bakelite is the answer.

Specify Color Desired When Ordering

Choice of Oak, Black, White or Ivory

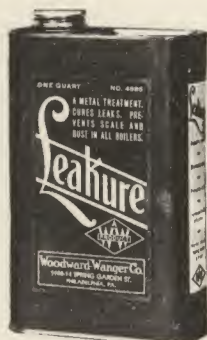
No.	Size	No.	Size
5040	1/2"	5043	1 1/4"
5041	3/4"	5044	1 1/2"
5042	1"	5045	2"



Woodward Wanger Co.



Heating Sundries



Leakure for Boilers

Highly recommended for sealing cracks and fissure leaks in steam and hot water boilers; and also in new installations. Will seal sand hole leaks as well as joint and thread leaks. Fifteen years of satisfactory service is your best guarantee of the work it will do.

No. 4885 Contents
One Quart

Seals-Rite for Boilers

A metallic powder that has been thoroughly tested and proven. Recommended for hot water boilers, steam boilers and new installation. Used for exactly the same purpose as "Leakure", but Seals-Rite is a powder. It forms a permanent patch at the sand hole, leak or break, and will stubbornly resist high pressures. Contains a cleaning element that will remove foreign matter from the system.

No. 4886 One Quart Can



Boiler Cleaner

Will remove rust and scale from hot water boilers, steam boilers, pipes, etc. Just mix and place in the system as directed, one can to every 100 square feet of radiation up to 600 square feet. After that, one can to every 150 square feet. Full directions on can. In steam plants it eliminates the scale scum and film which form on the surface of the water causing waste of fuel.

No. 4915 1 lb. can

"Ceko" Metallic Filler

—In Place of Welding—

"Ceko" Metallic Filler is most valuable for speedy and permanent repairs of cracked castings. It is not a paste, liquid or soft solder, it is a bronze alloy of considerable hardness and is worked plastic and not in the molten state. It can be used on the most difficult overhead repairs, on boiler sections, radiators, pipes, valves, etc. This remarkable compound adheres quickly and permanently to cast iron, and all other metals with exception of aluminum. It fuses in place at approximately one-fifth the cost of a welding job, and in addition it requires no special tools or equipment for its application. Every plumber's kit should contain a can of Ceko Metal Filler. Full directions on every box.

No. 4913 ¼ lb.
No. 4914 1 lb.





Woodward Wanger Co.



Bronze and Aluminum

Bronze and Aluminum Powder



Nos. 4842-4843

A highly satisfactory Bronze Powder. Easy to mix, has good coverage, and will permit you to leave your new installation with a highly attractive and lasting finish. Will not crack or peel off and retains its bright lustre over a long period of time.

Bronzing Liquid



No. 4849

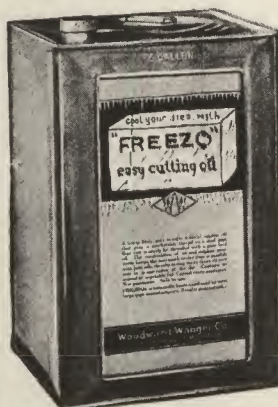
One Pound Cans

No. 4842Pale Gold Bronze Powder
No. 4843Aluminum Bronze Powder

An absolutely reliable grade of Bronzing liquid.

No. 4849 Gallon cans only.

"FREEZO" Easy Cutting Oil



Use "Freezo" as you would any other cutting oil. But less of it. The heavy body film clings to the metal longer, requires less oil and reduces friction to a minimum. The tool does not quickly heat up and the die lasts much longer.

"Freezo" puts a good, clean thread on steel pipe. Prevents rust and will outlast ordinary cutting oil. Is thoroughly antiseptic.

We do not charge for containers and make no allowance for their return. Shipments of "Freezo" are made by freight, prepaid.

No. 5000One Gallon
No. 5001 5 Gallon Can
No. 5003 ½ Barrel (Steel Drum)
Containing 30 Gallons



Woodward Wanger Co.



Pipe-Hanging Chain Niagara Pattern

No.	Gauge	For Pipe	Tensile Strength
4644A—Chain	..... 9	3½" to 8"	1675 lbs.
4644B—Chain	..... 11	2½" to 3"	1130 lbs.
4644C—Chain	..... 13	1½" to 2"	690 lbs.
4644D—Chain	..... 14	1" to 1½"	505 lbs.

No. 4645A—Ox Bow Hanger for Pipe from 2½" to 8".

No. 4645B—Ox Bow Hanger for Pipe from 1" to 2".

No. 4646A—Large Screw Hook for No. 4645A.

No. 4646B—Small Screw Hook for No. 4645B.



No. 4646A
Large Screw Hook
for No. 4645A

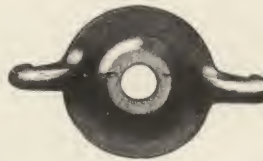
No. 4646B
Small Screw Hook
for No. 4645B



No. 4645A—Ox Bow Hanger



Chain and Hanger in Position



No. 4645B—Ox Bow Hanger

Extension Bar Pipe Hanger



Made of the finest quality mild Steel, with holes ½" apart. Steel is soft, easy to work with and easy to cut with heavy shears or cold chisel. Be sure to specify Catalog Number and number of feet wanted.

Catalog Number	Width and Gauge	Size Hole	Center to Center of Hole	Feet per Standard Bundle
4665A	¾ x 18g	¼"	½"	250
4665B	¾ x 16g	¼"	½"	250
4665C	⅞ x 16g	¼"	½"	250
4665D	1 x 14g	¼"	½"	250
4665E	1½ x 12g	⅜"	½"	250
4665F	1¼ x 12g	⅜"	¾"	100
4665G	1¼ x ⅜"	⅜"	¾"	100
4665H	1½ x ¼"	½"	1"	100

Steel Band Hanger and Flat End Lag Screw

A strong Steel Band for Hanging Pipe. Has two holes for adjustment. Extensively used on large pipe.



No.	Diameter	Lag Screw
4666	1"	No. 1
4666A	1¼"	No. 1
4666B	1½"	No. 1
4666C	2"	No. 2
4666D	2½"	No. 2
4666E	3"	No. 2
4666F	4"	No. 2

No. 4666G—Lag Screw No. 1—5/16"x3"

No. 4666H—Lag Screw No. 2—2" x3"



Woodward Wanger Co.



Humidifier Valves

An Automatic Valve for Maintaining a Constant Level of Water in the
Water Pan of Warm Air Furnaces

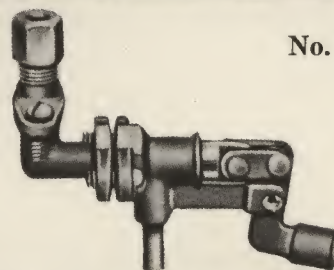


Moving parts clear of the water, cannot corrode or stick, plunger Chromium Plated. Cast parts of ingot brass.

Can be installed in half hour without dropping the fire. Drill the pan or pan cover for the valve, and drill a convenient cold water pipe line for the strap valve.

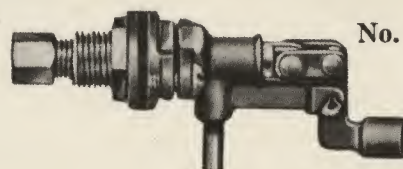
Choice of two models each priced alike.

TWO MODELS



No. 3073

No. 3073—For installing through the top of the Pan Cover.



No. 3074

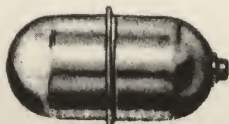
No. 3074—For installing through the side of the Pan Cover (as illustrated).

THESE PARTS GO WITH EVERY VALVE

Complete Installation Equipment



STRAP
VALVE



COPPER FLOAT



FLOAT ROD

All Screws and Nuts Come
With the Valves



10 FT. COPPER TUBING

EVERY WARM AIR FURNACE NEEDS A HUMIDIFIER VALVE

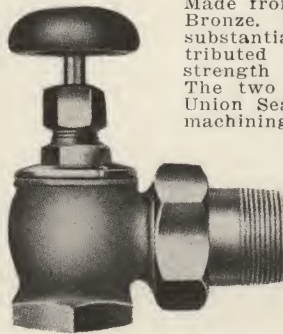


Woodward Wanger Co.



Radiator Valves for Steam and Hot Water

ANGLE VALVE —STEAM—

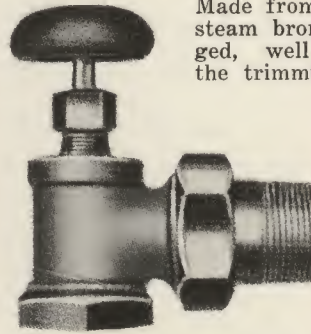


Made from high grade steam Bronze. Design is heavy and substantial and metal is distributed so as to provide strength where most needed. The two surfaces forming a Union Seat, due to the extra machining given them, readily makes a steam-tight joint. This seat is formed by the combination of an angle and a curved surface.

Nos. 4731-4736

No. 4731 1/2" No. 4733 1" No. 4735 1 1/2"
No. 4732 3/4" No. 4734 1 1/4" No. 4736 2"

ANGLE VALVE —HOT WATER—

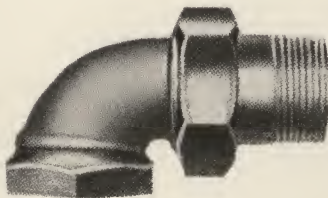


Made from the highest quality steam bronze. A strong, rugged, well-made valve with the trimmings highly polished. Handwheel black moulded composition. Bonnet and body cast in one piece.

Nos. 4737-4742

No. 4737 1/2" No. 4739 1" No. 4741 1 1/2"
No. 4738 3/4" No. 4740 1 1/4" No. 4742 2"

Union Elbows



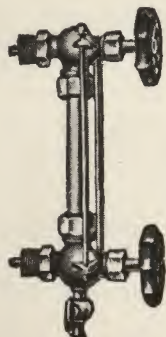
This is a heavy pattern, well-made Union Elbow, accurately machined and finished. Each one carefully tested. Threaded right hand on both inlet and outlet.

No. 4743 1/2" No. 4745 1" No. 4747 1 1/2"
No. 4744 3/4" No. 4746 1 1/4" No. 4748 2"

Self-cleaning Water Gauges

With Iron Wheels

Substantially made and very serviceable. The first three numbers shown (4795A, 4795B, 4795C) have bronze bodies. The balance have polished bodies.



Bronzed Body

No.	Size Glass Inches	No. of Guards	Pipe Thread Inches
4795A	5/8x10	2	3/8
4795B	5/8x10	2	3/8
4795C	5/8x12	2	1/2
4795D	3/4x16	2	3/4
4795E	5/8x12	2	1/2
4795F	5/8x12	4	1/2
4795G	3/4x16	4	3/4

Scotch Gauge Glasses

For 200 Pounds Steam Pressure



Lengths not regular are charged at price of next larger tubes of same diameter.

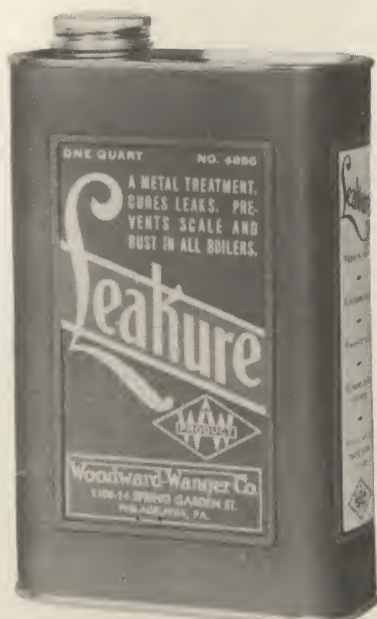
Length In.	1/2	3/4	1
8	4796	4797	4798
9	4796A	4797A	4798A
10	4796B	4797B	4798B
11	4796C	4797C	4798C
12	4796D	4797D	4798D
13	4796E	4797E	4798E
14	4796F	4797F	4798F
15	4796G	4797G	4798G
16	4796H	4797H	4798H
17	4796I	4797I	4798I
18	4796J	4797J	4798J
19	4796K	4797K	4798K
20	4796L	4797L	4798L



Woodward Wanger Co.



BOILER COMPOUNDS



No. 4885
QUART CAN

Leakure

A LIQUID

We have been selling Leakure to the Master Plumbers of American for more than 15 years, and it is highly endorsed by ALL who have used it.

Leakure is highly recommended for sealing cracks and fissure leaks in steam and hot water boilers, and in new installations. Seals sand hole leaks, as well as joint and thread leaks. Use Leakure and be sure. A high grade compound, reasonably priced.

Fifteen years of satisfactory service is your best guarantee of the work it will do. Our volume on this item steadily increases each year. Packed in one quart cans.

Seals-Rite

A POWDER

This is a highly satisfactory Metallic Powder that has been thoroughly tested and proven. It is recommended for Hot Water Boilers, Steam Boilers, and New Installations. Used for exactly the same purpose as Leakure only some prefer a powder.

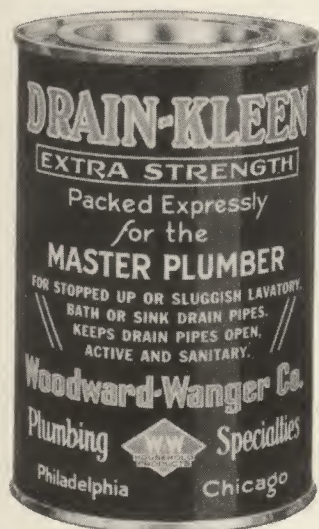
We believe it to be the equal of any Mettalllic Powder seal on the market, regardless of cost. It forms a permanent patch at the sand hole, leak or break, and will stubbornly resist high pressures. Seals-Rite also contains a cleaning element that is intended to remove foreign matter from the system. It will not deteriorate.



No. 4886
QUART CAN



Woodward Wanger Co.



No. 4878

One Pound can with Aluminium Chips

16 OUNCE CAN DRAIN CLEAN DRAIN PIPE SOLVENT

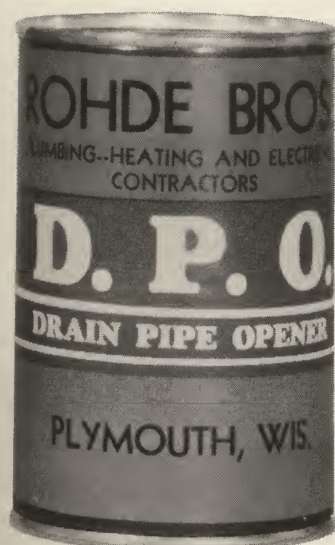
The Hottest Solvent made. Until the creation of "Drain Clean", solvents were very much alike, but through exhaustive experiments we found a combination of ingredients that developed a much hotter and faster working Drain Solvent. It goes to work faster and maintains its heat longer than any solvent made.

In "Drain Clean" and our other solvent packages we have almost totally eliminated the biting, choking, pungent odor. This is accomplished through the use of a vegetable matter, which neutralizes the fumes, but in no way retards the action of the solvent.

Mix into a galvanized bucket containing two quarts of cold water (not ice cold) the contents of one can, and after one minute of mixing, pour down the drain.

Packed 24 cans to a carton. Sold in multiples of two dozen.

**ONLY THE LABELS ARE DIFFERENT IN THESE
TWO 16 OUNCE CANS OF DRAIN SOLVENT**



No. 4876

One Pound can with Aluminium Chips

16 OUNCE CAN WITH PLUMBERS OWN LABEL D. P. O. DRAIN PIPE OPENER

A one pound can with exactly the same contents as "Drain Clean" is now offered to the Master Plumber with his own label. This offers the Master Plumber an opportunity to sell an extremely satisfactory article as his own product—a product made especially for him.

Excellent advertising value, and customers who use it will know where to go when they want more

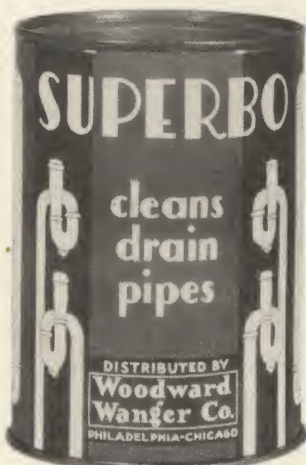
There is no additional cost when buying Drain Clean with your own D. P. O. (Drain Pipe Opener) Label, providing they are purchased in quantities of Six or more dozen. There is ample room for the plumber's name, address, telephone number or slogan.

Full directions as to how it should be used are printed on the label.

Packed 24 cans to a carton. Sold in multiples of two dozen.



Woodward Wanger Co.



No. 4874

12 ounce can with Aluminium Chips

12 OUNCE CAN
SUPERBO
DRAIN PIPE SOLVENT

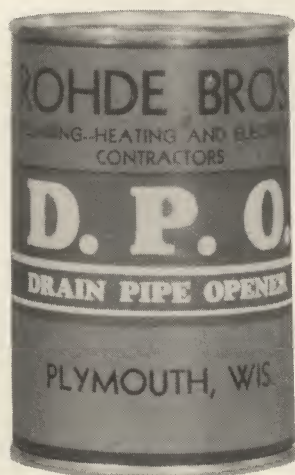
Superbo, except for the fact that it is a smaller can, is otherwise exactly the same as Drain Clean, extremely hot, fast action solvent with practically no objectionable fumes.

For resale purposes many Plumbers prefer the twelve ounce can so they can sell it without being so far out of line with the more commonly used Chain Store Products.

Superbo is put up in a beautiful lithographed can, and unless the stoppage is very stubborn or one of long standing, a twelve ounce can will do the job. It should be dissolved in three pints of cold water (not ice cold).

Packed two dozen to a carton.

**ONLY THE LABELS ARE DIFFERENT IN THESE
12 OUNCE CANS OF DRAIN SOLVENT**



No. 4872

12 ounce can with Aluminium Chips

12 OUNCE CAN
WITH PLUMBERS OWN LABEL
D. P. O.
DRAIN PIPE OPENER

We now offer the Plumber an opportunity of buying our red-hot Solvent in a twelve ounce can with his own label. This offers an excellent advertising value, and there is no additional cost attached to the labelling of this product, as if it were your own.

Quantities purchased, however, must consist of six dozen cans or more, as the printing of special labels in smaller quantities would be entirely too expensive. Many Master Plumbers have built up a very excellent and a very profitable repeat business on solvent, through the use of this 'D. P. O.' Label.

Packed two dozen to a carton.



Woodward Wanger Co.



"SUPERBO" PIPE JOINT CEMENT

A PASTE



Our "Superbo" Pipe Joint Cement always remains the same. The ingredients stay in suspension—always ready for use. That is why it enjoys such wide popularity among those who have, and are still using it.

It has a high-grade metallic base, compounded with a blend of oxidizing oils, and forms a metal to metal contact, producing leak-proof joints. It will not shrink, crumble, crack, break or get hard in the can. It is always ready for use.

Most products of this kind, when they stand for any length of time, have a sediment at the bottom which becomes hard, and when wanted for use, it is necessary to waste a lot of time mixing it again.

No. 4826—1 Pound Lithographed Can
No. 4827—5 Pound Can With Handle

"SUPERBO" PIPE JOINT CEMENT

DRY POWDER



This Cement is in powder form and requires mixing with pure boiled Linseed Oil. This Cement is a combination of the best material known for the purpose, and will resist the action of all forms of corrosion.

You can mix as much as you need for the job at hand, thus eliminating waste. It produces a paste that is thoroughly water and heat-proof, admits of expansion and contraction without the least injury to the joint, which maybe broken after years of wear without the slightest damage to either pipe or coupling.

We have a host of satisfied Plumbers and Steamfitters who have used this powder for years, buying it in the larger size cans.

No. 4831..... 5 lb. can
No. 4832..... 10 lb. can
No. 4833..... 50 lb. can



Woodward Wanger Co.



Made for those who appreciate something better



No. 4895

further and lasts longer because only a small quantity is needed to do a thorough cleansing job.
14 OUNCE SHAKER TOP CAN

KLENZ-RITE

**Enamel and Porcelain
CLEANER**

For cleaning and Polishing all enamelware and porcelain fixtures in the home. Klenz-Rite has been in our line for many years, and its quality is unquestioned. It has no harsh ingredients and will not scratch the mirror-like porcelain surface; nor will it in any way harm the hands.

We have built into Klenz-Rite, the finest of cleaning material. It cleans without scratching, because it dissolves oil, grease and dirt spots, instead of scratching them loose. Klenz-Rite goes

Products of this type are fast gaining favor



No. 4907

popular, and every plumber should be in a position to supply them to his customers when wanted. Bowl Bleach is put up in cans containing 1 pound 6 ounces of the product itself.

BOWL BLEACH

**Keeps Toilet Bowls Sanitary and
CLEAN**

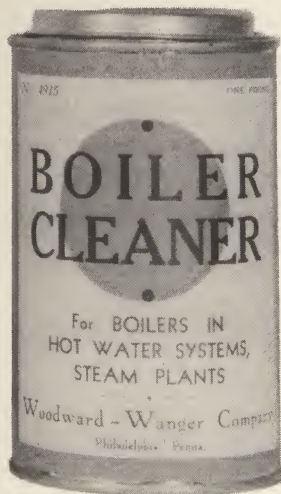
A White Granulated Chemical for removing stains from Toilet Bowls. Bowl Bleach is especially good for removing rust stains from under the rim of the Toilet Bowl.

It will not harm the finest porcelain. If the stain is of long standing, rubbing with a stiff closet brush, or a rag fastened to the end of a stick will help to more quickly bring about the decided results; or leave Bowl Bleach remain in the bowl over night.

Bowl Bleach, and similar products are becoming more and more popular, and every plumber should be in a position to supply them to his customers when wanted. Bowl Bleach is put up in cans containing 1 pound 6 ounces of the product itself.



Woodward Wanger Co.



No. 4915
ONE POUND CAN

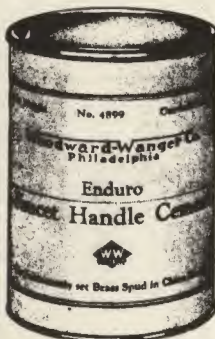
BOILER CLEANER COMPOUND

Will remove rust and scale from Hot Water Boilers, Steam Boilers, Pipes and etc.

Mix and place in the system as directed, one can to every 100 square feet of Radiation up to 600 square feet. After that one can to every 150 square feet. Fire system for 3 hours and then drain. All rust, scale and foreign matter will be removed. It assures a supply of clean, clear water from Hot Water Systems by eliminating the cause.

In Steam Plants it eliminates the scale, scum and film which form on the surface of the water, causing waste of fuel in producing steam. After mixing and placing in the System as directed, Boiler is put under pressure for 3 hours and then drained and flushed clean.

"ENDURO" FAUCET HANDLE CEMENT



No. 4899

It takes but ten minutes for this quick setting cement to securely and permanently fasten a brass spud in a chain handle. Many cements require 24 hours for hardening.

Melt to boiling point in spoon, fill the cavity of the china handle and press the spud into place. In a few minutes scrape off the surplus cement and the job is done.

Illustration is of the half pound can.

4898	2 ounces
4899	half pound
4899½	envelope of cement, good for six handles

ODO-FLUSH CAKE TOILET TANK DEODORANT



No. 4910

This is a very pleasing Bathroom Deodorant which keeps the toilet bowl, as well as the toilet tank, sanitary and deodorized.

Hang one cake by the copper wire on the overflow tube inside the tank. Every time the tank is flushed, you are conscious of the mild pleasing odor.

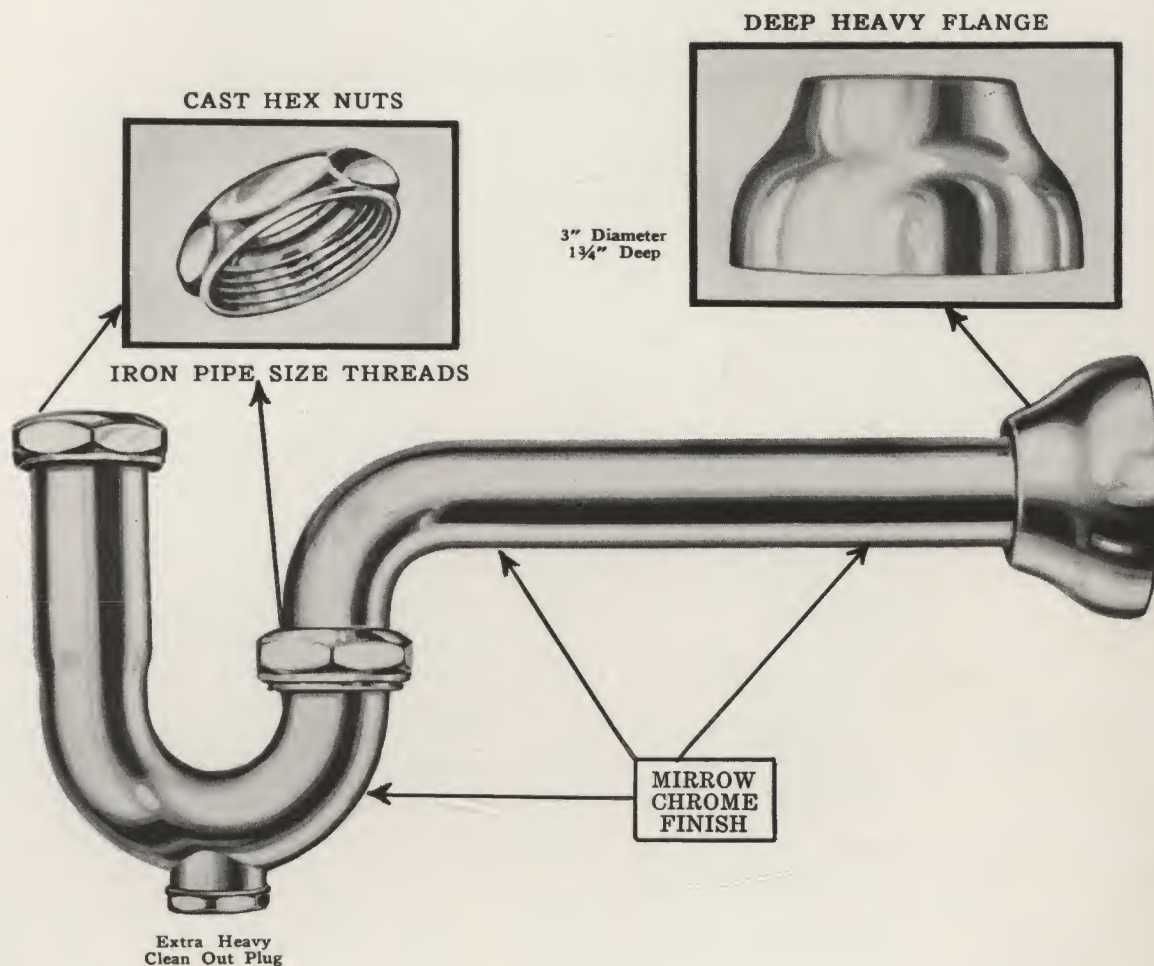
This decidedly pleasant Odo-Flush scent can be made stronger by exposing half of it to the air, having the other half immersed in water when the tank is full. Packed 12 to the Box.



Woodward Wanger Co.



TRAPS



OUTSTANDING FEATURES

- (1) Equipped with extra heavy Cast Hex Nuts with Iron Pipe sized threads.
- (2) Deep heavy flanges (1 3/4" deep).
- (3) Length 12" from center to end.
- (4) Chromium Plating is heavy and polished to a Mirrow-like finish. We call it Mirrow-

Chrome because it is superior to the usual commercial finishes used on traps.

- (5) Flat Washer Joint.
- (6) All traps are assembled before shipping.
- (7) Each trap is separately wrapped and packed in a strong, reinforced Metal Edge Box

The prefix "20" or "17" before catalog number indicate the gauge of the tubing.

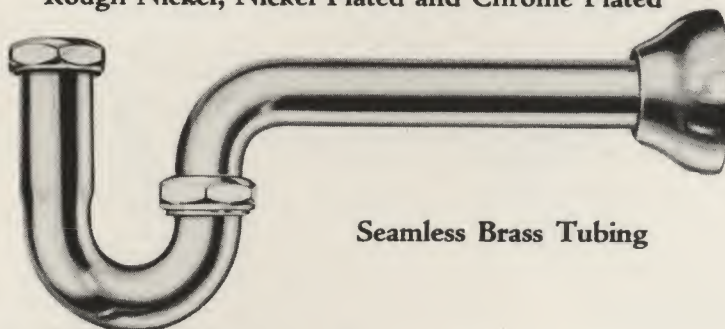


Woodward Wanger Co.



"P" TRAPS

Rough Nickel, Nickel Plated and Chrome Plated



Seamless Brass Tubing

20 Gauge 1 $\frac{1}{4}$ " No Cleanout

ROUGH NICKEL	NICKEL PLATED	MIRROW CHROME	
20-6000 R.N.	20-6000 N.P.	20-6000-C	Less connection
	20-6002 N.P.	20-6002-C	With No. 3650 P.O. Plug
	20-6003 N.P.	20-6003-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " No Cleanout

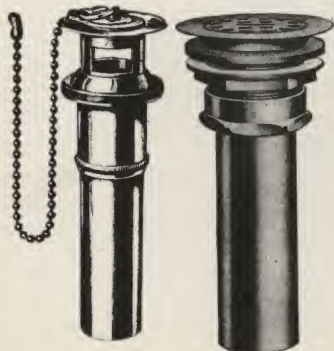
NICKEL PLATED	MIRROW CHROME	
17-6000 N.P.	17-6000-C	Less connection
17-6002 N.P.	17-6002-C	With No. 3650 P.O. Plug
17-6003 N.P.	17-6003-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " No Cleanout

ROUGH NICKEL	NICKEL PLATED	MIRROW CHROME	
20-6005 R.N.	20-6005 N.P.	20-6005-C	Less connection
	20-6007 N.P.	20-6007-C	With No. 3650 P.O. Plug
	20-6008 N.P.	20-6008-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " No Cleanout

NICKEL PLATED	MIRROW CHROME	
17-6005 N.P.	17-6005-C	Less connection, with 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " Inlet
17-6007 N.P.	17-6007-C	With No. 3650 P.O. Plug
17-6008 N.P.	17-6008-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.

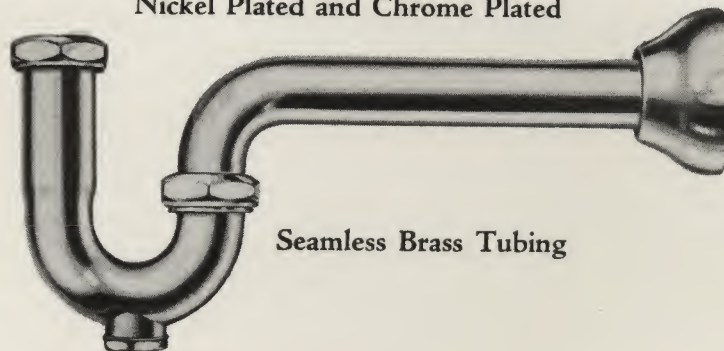


Woodward Wanger Co.



"P" TRAPS

Nickel Plated and Chrome Plated



Seamless Brass Tubing

20 Gauge 1 $\frac{1}{4}$ " With Cleanout

NICKEL PLATED MIRROR CHROME

20-6010 N.P.

20-6010-C

Less connection

20-6012 N.P.

20-6012-C

With No. 3650 P.O. Plug

20-6013 N.P.

20-6013-C

With No. 4265 Sink Strainer and
No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With Cleanout

NICKEL PLATED MIRROR CHROME

17-6030 N.P.

17-6030-C

Less connection

17-6032 N.P.

17-6032-C

With No. 3650 P.O. Plug

17-6033 N.P.

17-6033-C

With No. 4265 Sink Strainer and
No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With Cleanout

NICKEL PLATED MIRROR CHROME

20-6015 N.P.

20-6015-C

Less connection

20-6017 N.P.

20-6017-C

With No. 3650 P.O. Plug

20-6018 N.P.

20-6018-C

With No. 4265 Sink Strainer and
No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With Cleanout

NICKEL PLATED MIRROR CHROME

17-6035 N.P.

17-6035-C

Less connection

17-6037 N.P.

17-6037-C

With No. 3650 P.O. Plug

17-6038 N.P.

17-6038-C

With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.

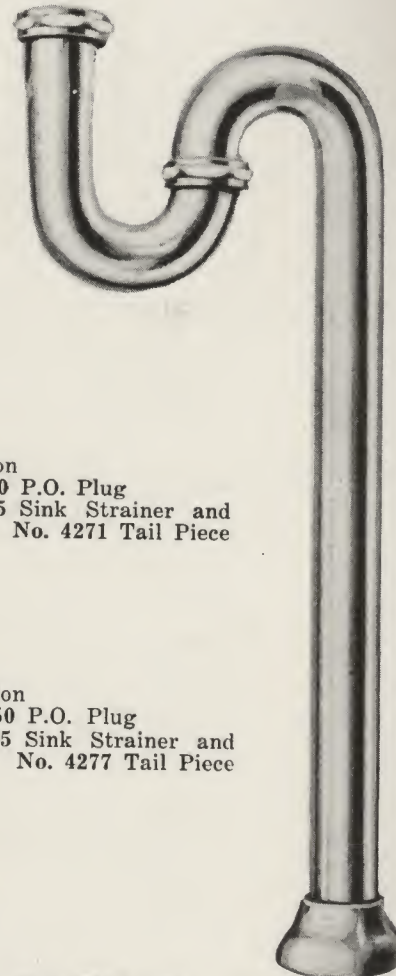


"S" TRAPS

Rough Nickel — Nickel Plated — Chrome Plated

Seamless Brass Tubing

W-W Traps are equipped with Cast Hex Nuts. These nuts have Iron Pipe sized threads. W-W Traps have deep heavy flanges (1¼" deep). The Chromium Plating is heavy and is polished to a mirror-like finish. We call it Mirror Chrome. All traps are fitted before being packed and shipped. And each trap is separately wrapped and packed in a strong, reinforced Metal Edge Box.



20 Gauge 1¼" No Cleanout

Regular length, 20½" long

ROUGH NICKEL NICKEL PLATED MIRROR CHROME

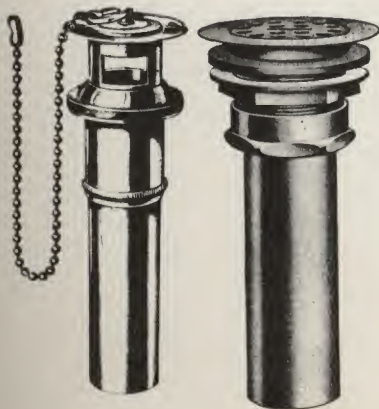
20-6100 R.N.	20-6100 N.P.	20-6100-C	Less connection
	20-6102 N.P.	20-6102-C	With No. 3650 P.O. Plug
	20-6103 N.P.	20-6103-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

20 Gauge 1½" No Cleanout

Regular length, 20½" long

ROUGH NICKEL NICKEL PLATED MIRROR CHROME

20-6105 R.N.	20-6105 N.P.	20-6105-C	Less connection
	20-6107 N.P.	20-6107-C	With No. 3650 P.O. Plug
	20-6108 N.P.	20-6108-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece



No. 3650 Cast Brass P. O. Plug 2¾" long, 1¼"-20 Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2½" openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering 1½" traps, specify 1¼" or 1½" inlet nut. If not specified 1¼" nut will be furnished.



Woodward Wanger Co.



"S" TRAPS

Nickel Plated and Chrome Plated

Seamless Brass Tubing

20 Gauge 1 $\frac{1}{4}$ " With Cleanout

Regular length, 20 $\frac{1}{2}$ " long

NICKEL PLATED

20-6115 N.P.

20-6117 N.P.

20-6118 N.P.

MIRROR CHROME

20-6115-C

20-6117-C

20-6118-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With Cleanout

Regular length, 20 $\frac{1}{2}$ " long

NICKEL PLATED

17-6115 N.P.

17-6117 N.P.

17-6118 N.P.

MIRROR CHROME

17-6115-C

17-6117-C

17-6118-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With Cleanout

Regular length, 20 $\frac{1}{2}$ " long

NICKEL PLATED

20-6120 N.P.

20-6122 N.P.

20-6123 N.P.

MIRROR CHROME

20-6120-C

20-6122-C

20-6123-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With Cleanout

Regular length, 20 $\frac{1}{2}$ " long

NICKEL PLATED

17-6120 N.P.

17-6122 N.P.

17-6123 N.P.

MIRROR CHROME

17-6120-C

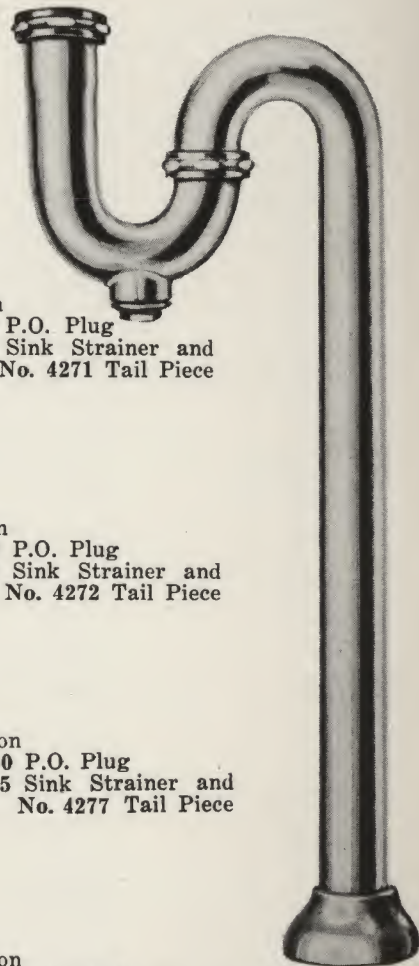
17-6122-C

17-6123-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long,
1 $\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be
furnished 6", 8" and 12" long. (See page 9.)
The No. 4265 Sink Strainer has 3" diameter
flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and
can be furnished with 17 and 22 gauge Tail
Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



EXTRA LONG "S" TRAPS

Nickel Plated and Chrome Plated
Seamless Brass Tubing

W-W Traps are equipped with Cast Hex Nuts. These nuts have Iron Pipe sized threads. W-W Traps have deep heavy flanges ($1\frac{3}{4}$ " deep). The Chromium Plating is heavy and is polished to a mirror-like finish. We call it Mirrow Chrome. All traps are fitted before being packed and shipped. And each trap is separately wrapped and packed in a strong, reinforced Metal Edge Box.

EXTRA LENGTH

20 Gauge $1\frac{1}{4}$ " No Cleanout

26" long, or $5\frac{1}{2}$ " longer than regular

NICKEL PLATED MIRROW CHROME

L-20-6100 N.P.

L-20-6102 N.P.

L-20-6103 N.P.

L-20-6100-C

L-20-6102-C

L-20-6103-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4271 Tail Piece

20 Gauge $1\frac{1}{2}$ " No Cleanout

26" long, or $5\frac{1}{2}$ " longer than regular

NICKEL PLATED MIRROW CHROME

L-20-6105 N.P.

L-20-6107 N.P.

L-20-6108 N.P.

L-20-6105-C

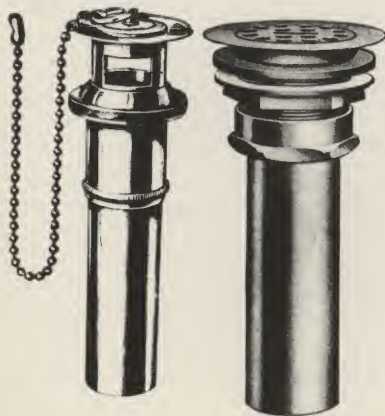
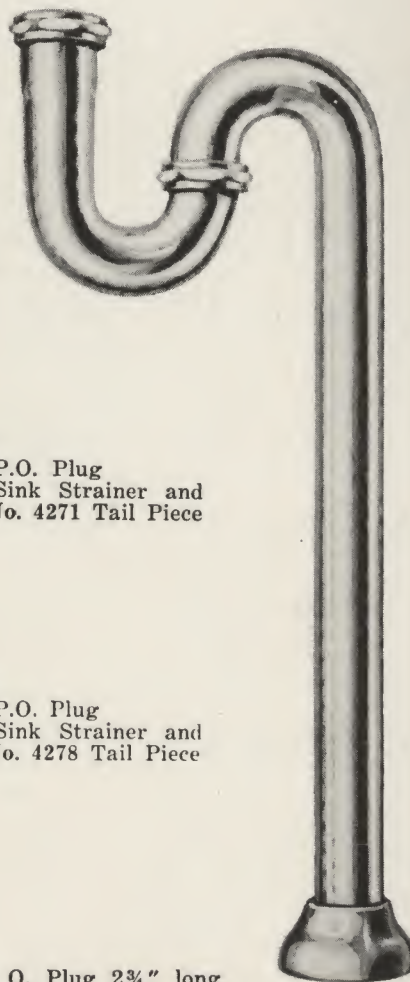
L-20-6107-C

L-20-6108-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug $2\frac{3}{4}$ " long, $1\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to $2\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering $1\frac{1}{2}$ " traps, specify $1\frac{1}{4}$ " or $1\frac{1}{2}$ " inlet nut. If not specified $1\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



EXTRA LONG "S" TRAPS

Nickel Plated and Chrome Plated

Seamless Brass Tubing

20 Gauge 1 $\frac{1}{4}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

MIRROR CHROME

L-20-6115 N.P.

L-20-6115-C

Less connection

L-20-6117 N.P.

L-20-6117-C

With No. 3650 P.O. Plug

L-20-6118 N.P.

L-20-6118-C

With No. 4265 Sink Strainer and
No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

MIRROR CHROME

L-17-6115 N.P.

L-17-6115-C

Less connection

L-17-6117 N.P.

L-17-6117-C

With No. 3650 P.O. Plug

L-17-6118 N.P.

L-17-6118-C

With No. 4265 Sink Strainer and
No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

MIRROR CHROME

L-20-6120 N.P.

L-20-6120-C

Less connection

L-20-6122 N.P.

L-20-6122-C

With No. 3650 P.O. Plug

L-20-6123 N.P.

L-20-6123-C

With No. 4265 Sink Strainer and
No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

MIRROR CHROME

L-17-6120 N.P.

L-17-6120-C

Less connection,

L-17-6122 N.P.

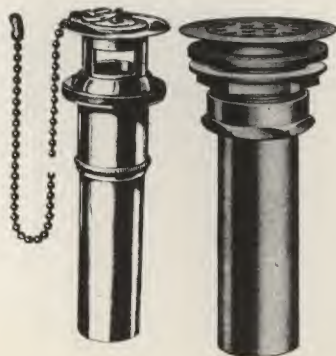
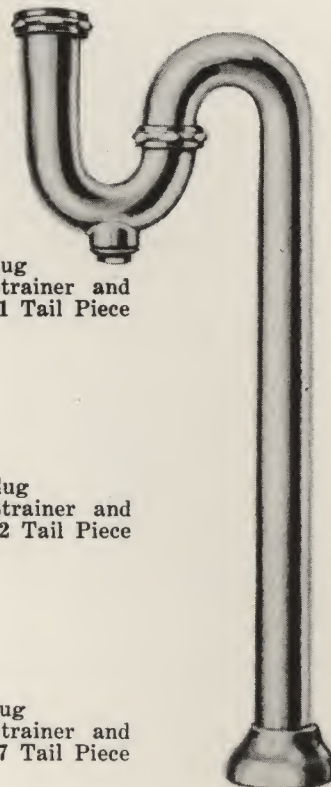
L-17-6122-C

With No. 3650 P.O. Plug

L-17-6123 N.P.

L-17-6123-C

With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long,
1 $\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be
furnished 6", 8" and 12" long. (See page 9.)
The No. 4265 Sink Strainer has 3" diameter
flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and
can be furnished with 17 and 22 gauge Tail
Pieces 4", 6", 8" and 12" long. (See page 16.)

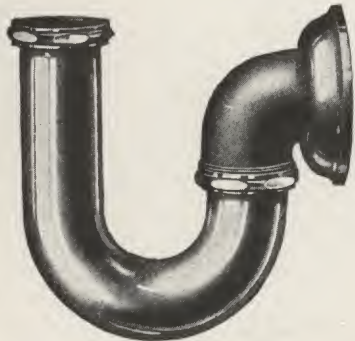
When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



SINK TRAPS



Rough Nickel, Nickel Plated
and Chrome Plated

Bent Tube "P" Trap. Wrought Brass
Tubing, with Brass Elbow.

20 Gauge 1 $\frac{1}{4}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6200 R.N.	20-6200 N.P.	20-6200-C	Less connection
20-6202 R.N.	20-6202 N.P.	20-6202-C	With Sink Strainer No. 4265 and Tail Piece No. 4271
20-6203 R.N.	20-6203 N.P.	20-6203-C	With No. 3650 P.O. Plug

17 Gauge 1 $\frac{1}{4}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6200 R.N.	17-6200 N.P.	17-6200-C	Less connection
17-6202 R.N.	17-6202 N.P.	17-6202-C	With Sink Strainer No. 4265 and Tail Piece No. 4272
17-6203 R.N.	17-6203 N.P.	17-6203-C	With No. 3650 P.O. Plug

20 Gauge 1 $\frac{1}{2}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6205 R.N.	20-6205 N.P.	20-6205-C	Less connection
20-6206 R.N.	20-6206 N.P.	20-6206-C	With Sink Strainer No. 4265 and Tail Piece No. 4277
20-6207 R.N.	20-6207 N.P.	20-6207-C	With No. 3650 P.O. Plug

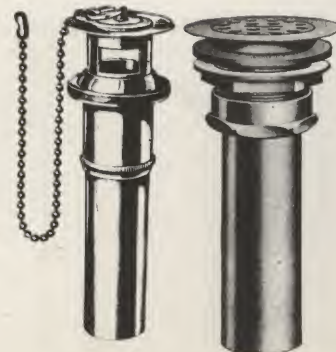
17 Gauge 1 $\frac{1}{2}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6205 R.N.	17-6205 N.P.	17-6205-C	Less connection
17-6206 R.N.	17-6206 N.P.	17-6206-C	With Sink Strainer No. 4265 and Tail Piece No. 4278
17-6207 R.N.	17-6207 N.P.	17-6207-C	With No. 3650 P.O. Plug

20 Gauge 2" No Cleanout

Rough-Nickel
20-6215 R.N.less connection.

No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)



When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



EXTRA LONG "S" TRAPS

Nickel Plated and Chrome Plated

Seamless Brass Tubing

20 Gauge 1 $\frac{1}{4}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

L-20-6115 N.P.

L-20-6117 N.P.

L-20-6118 N.P.

MIRROR CHROME

L-20-6115-C

L-20-6117-C

L-20-6118-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

L-17-6115 N.P.

L-17-6117 N.P.

L-17-6118 N.P.

MIRROR CHROME

L-17-6115-C

L-17-6117-C

L-17-6118-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

L-20-6120 N.P.

L-20-6122 N.P.

L-20-6123 N.P.

MIRROR CHROME

L-20-6120-C

L-20-6122-C

L-20-6123-C

Less connection

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With Cleanout

26" long, or 5 $\frac{1}{2}$ " longer than regular

NICKEL PLATED

L-17-6120 N.P.

L-17-6122 N.P.

L-17-6123 N.P.

MIRROR CHROME

L-17-6120-C

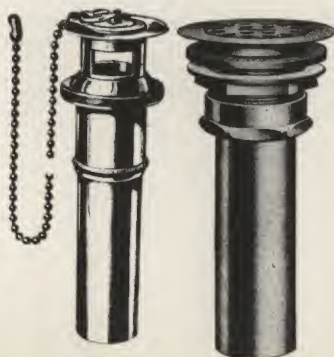
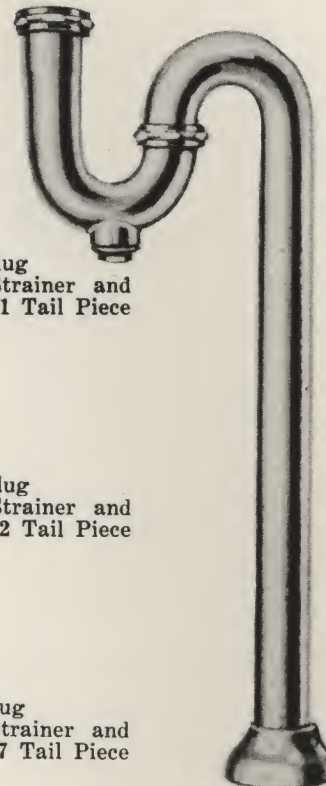
L-17-6122-C

L-17-6123-C

Less connection,

With No. 3650 P.O. Plug

With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long,
1 $\frac{1}{4}$ "-20 Wrought Brass Tail Piece. Can be
furnished 6", 8" and 12" long. (See page 9.)
The No. 4265 Sink Strainer has 3" diameter
flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and
can be furnished with 17 and 22 gauge Tail
Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



SINK TRAPS



Rough Nickel, Nickel Plated
and Chrome Plated

Bent Tube "P" Trap. Wrought Brass
Tubing, with Brass Elbow.

20 Gauge 1 $\frac{1}{4}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6200 R.N.	20-6200 N.P.	20-6200-C	Less connection
20-6202 R.N.	20-6202 N.P.	20-6202-C	With Sink Strainer No. 4265 and Tail Piece No. 4271
20-6203 R.N.	20-6203 N.P.	20-6203-C	With No. 3650 P.O. Plug

17 Gauge 1 $\frac{1}{4}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6200 R.N.	17-6200 N.P.	17-6200-C	Less connection
17-6202 R.N.	17-6202 N.P.	17-6202-C	With Sink Strainer No. 4265 and Tail Piece No. 4272
17-6203 R.N.	17-6203 N.P.	17-6203-C	With No. 3650 P.O. Plug

20 Gauge 1 $\frac{1}{2}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6205 R.N.	20-6205 N.P.	20-6205-C	Less connection
20-6206 R.N.	20-6206 N.P.	20-6206-C	With Sink Strainer No. 4265 and Tail Piece No. 4277
20-6207 R.N.	20-6207 N.P.	20-6207-C	With No. 3650 P.O. Plug

17 Gauge 1 $\frac{1}{2}$ " No Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6205 R.N.	17-6205 N.P.	17-6205-C	Less connection
17-6206 R.N.	17-6206 N.P.	17-6206-C	With Sink Strainer No. 4265 and Tail Piece No. 4278
17-6207 R.N.	17-6207 N.P.	17-6207-C	With No. 3650 P.O. Plug

20 Gauge 2" No Cleanout

Rough-Nickel
20-6215 R.N.less connection.

No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)



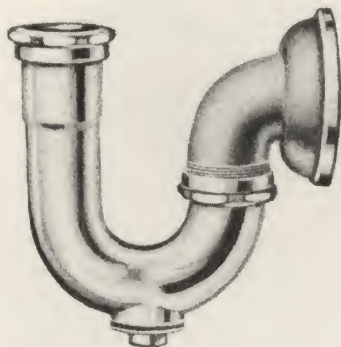
When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



SINK TRAPS



Rough Nickel, Nickel Plated
and Chrome Plated

Bent Tube "P" Trap. Wrought Brass
Tubing, with Brass Elbow.

20 Gauge 1 $\frac{1}{4}$ " With Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6208 R.N.	20-6208 N.P.	20-6208-C	Less connection.
20-6209 R.N.	20-6209 N.P.	20-6209-C	With Sink Strainer No. 4265 and Tail Piece No. 4271
20-6210 R.N.	20-6210 N.P.	20-6210-C	With No. 3650 P.O. Plug

17 Gauge 1 $\frac{1}{4}$ " With Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6208 R.N.	17-6208 N.P.	17-6208-C	Less connection
17-6209 R.N.	17-6209 N.P.	17-6209-C	With Sink Strainer No. 4265 and Tail Piece No. 4272
17-6210 R.N.	17-6210 N.P.	17-6210-C	With No. 3650 P.O. Plug

20 Gauge 1 $\frac{1}{2}$ " With Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
20-6211 R.N.	20-6211 N.P.	20-6211-C	Less connection
20-6212 R.N.	20-6212 N.P.	20-6212-C	With Sink Strainer No. 4265 and Tail Piece No. 4277
20-6213 R.N.	20-6213 N.P.	20-6213-C	With No. 3650 P.O. Plug

17 Gauge 1 $\frac{1}{2}$ " With Cleanout

Rough Nickel	Nickel Plated	Mirror Chrome	
17-6211 R.N.	17-6211 N.P.	17-6211-C	Less connection
17-6212 R.N.	17-6212 N.P.	17-6212-C	With Sink Strainer No. 4265 and Tail Piece No. 4278
17-6213 R.N.	17-6213 N.P.	17-6213-C	With No. 3650 P.O. Plug

No. 3650 Cast Brass P. O. Plug 2 $\frac{3}{4}$ " long,
1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece.
Can be furnished 6", 8" and 12" long. (See
page 9.) The No. 4265 Sink Strainer has 3"
diameter flange for sinks with 2" to 2 $\frac{1}{2}$ "
openings and can be furnished with 17 and 22
gauge Tail Pieces 4", 6", 8 and 12" long.
(See page 16.)



When ordering 1 $\frac{1}{2}$ " traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nut. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



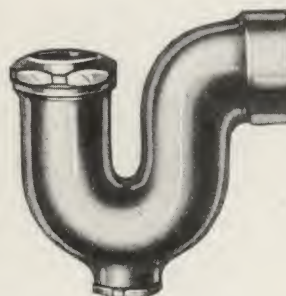
Woodward Wanger Co.



NEW YORK REGULATION TRAPS

Nickel Plated and Chrome

Cast Brass



Cast Brass 1½" With Cleanout

TAPPED 1½" I.P.S. OUTLET

Nickel Plated	Mirror Chrome
No. 6233 N.P.	No. 6233-C
No. 6235 N.P.	No. 6235-C
No. 6236 N.P.	No. 6236-C

Less Connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and No. 4271 (1¼")
or 4277 (1½") Tail Piece

Cast Brass 2" With Cleanout

TAPPED 2" I.P.S. OUTLET

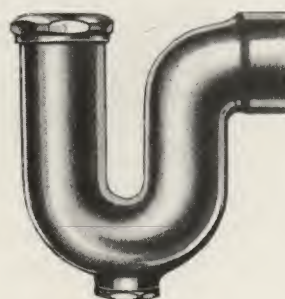
Nickel Plated	Mirror Chrome
No. 6246 N.P.	No. 6246 -C
No. 6248 N.P.	No. 6248 -C
No. 6249 N.P.	No. 6249 -C

Less Connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and No. 4271 (1¼")
or 4277 (1½") Tail Piece

BOSTON REGULATION TRAPS

Nickel Plated and Chrome

Cast Brass



Cast Brass 1½" With Cleanout

TAPPED 1½" I.P.S. OUTLET

Nickel Plated	Mirror Chrome
No. 6250 N.P.	No. 6250-C
No. 6251 N.P.	No. 6251-C
No. 6252 N.P.	No. 6252-C

Less Connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and No. 4271 (1¼")
or 4277 (1½") Tail Piece

Cast Brass 2" With Cleanout

TAPPED 2" I.P.S. OUTLET

Nickel Plated	Mirror Chrome
No. 6254 N.P.	No. 6254-C
No. 6255 N.P.	No. 6255-C
No. 6256 N.P.	No. 6256-C

Less Connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and No. 4271 (1¼")
or 4277 (1½") Tail Piece

When ordering traps, specify 1¼" or 1½" inlet nuts. If not specified 1¼" nut will be furnished.



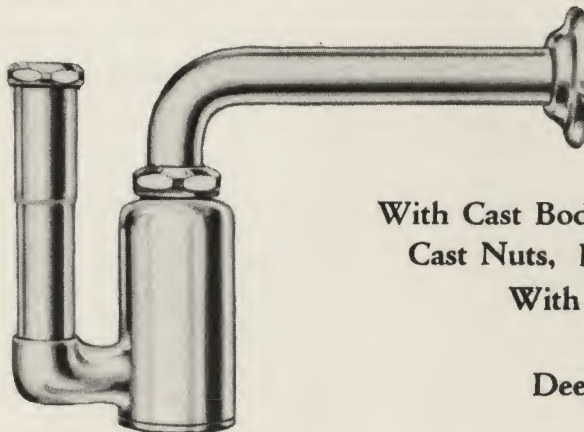
Woodward Wanger Co.



ANTI-SYPHON "P" TRAPS

Centrifugal
Pattern

12"
Center to End.



With Cast Body, Ground Joint,
Cast Nuts, Bent Wall Tube,
With Cleanout.

Deep Flange.

20 Gauge 1 $\frac{1}{4}$ " With 5" Body

Nickel Plated	Mirror Chrome	
20-6300 N.P.	20-6300-C	Less Connection
20-6302 N.P.	20-6302-C	With No. 3650 P.O. Plug
20-6303 N.P.	20-6303-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With 5" Body

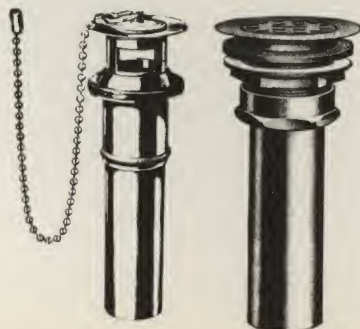
Nickel Plated	Mirror Chrome	
17-6300 N.P.	17-6300-C	Less Connection
17-6302 N.P.	17-6302-C	With No. 3650 P.O. Plug
17-6303 N.P.	17-6303-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With 5" Body

Nickel Plated	Mirror Chrome	
20-6305 N.P.	20-6305-C	Less Connection
20-6307 N.P.	20-6307-C	With No. 3650 P.O. Plug
20-6308 N.P.	20-6308-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With 5" Body

Nickel Plated	Mirror Chrome	
17-6305 N.P.	17-6305-C	Less Connection
17-6307 N.P.	17-6307-C	With No. 3650 P.O. Plug
17-6308 N.P.	17-6308-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece



No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nuts. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.



ANTI-SYPHON "P" TRAPS

Centrifugal
Pattern

12"
Center to End.



With Cast Body, Ground Joint,
Cast Nuts, Bent Wall Tube,
With Cleanout.

Deep Flange.

20 Gauge 1 $\frac{1}{4}$ " With 6" Body

Nickel Plated	Mirror Chrome	
20-6310 N.P.	20-6310-C	Less Connection
20-6312 N.P.	20-6312-C	With No. 3650 P.O. Plug
20-6313 N.P.	20-6313-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With 6" Body

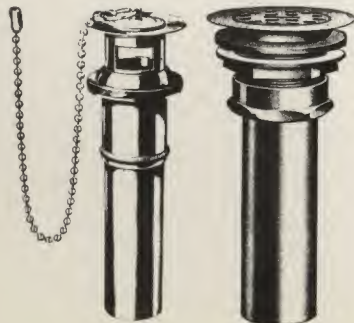
Nickel Plated	Mirror Chrome	
17-6310 N.P.	17-6310-C	Less Connection
17-6312 N.P.	17-6312-C	With No. 3650 P.O. Plug
17-6313 N.P.	17-6313-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With 6" Body

Nickel Plated	Mirror Chrome	
20-6315 N.P.	20-6315-C	Less Connection
20-6317 N.P.	20-6317-C	With No. 3650 P.O. Plug
20-6318 N.P.	20-6318-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With 6" Body

Nickel Plated	Mirror Chrome	
17-6315 N.P.	17-6315-C	Less Connection
17-6317 N.P.	17-6317-C	With No. 3650 P.O. Plug
17-6318 N.P.	17-6318-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece



No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nuts. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



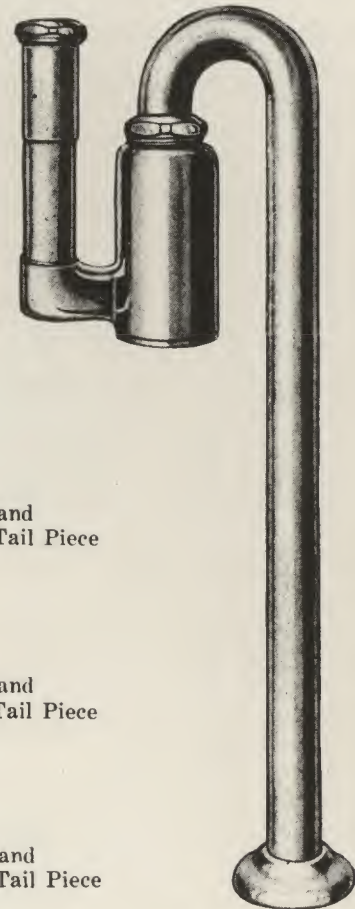
Woodward Wanger Co.



ANTI-SYPHON "S" TRAPS

Centrifugal Pattern

Cast Body, Ground Joint, Cast Nuts,
Bent Floor Tube, With Cleanout.
Deep Flange.
Regular Length—20½ Inches.



20 Gauge 1¼" With 5" Body

Nickel Plated	Mirror Chrome	
20-6320 N.P.	20-6320-C	Less Connection
20-6322 N.P.	20-6322-C	With No. 3650 P.O. Plug
20-6323 N.P.	20-6323-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1¼" With 5" Body

Nickel Plated	Mirror Chrome	
17-6320 N.P.	17-6320-C	Less Connection
17-6322 N.P.	17-6322-C	With No. 3650 P.O. Plug
17-6323 N.P.	17-6323-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1½" With 5" Body

Nickel Plated	Mirror Chrome	
20-6324 N.P.	20-6324-C	Less Connection
20-6326 N.P.	20-6326-C	With No. 3650 P.O. Plug
20-6327 N.P.	20-6327-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1½" With 5" Body

Nickel Plated	Mirror Chrome	
17-6324 N.P.	17-6324-C	Less Connection
17-6326 N.P.	17-6326-C	With No. 3650 P.O. Plug
17-6327 N.P.	17-6327-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece



No. 3650 Cast Brass P.O. Plug 2¾" long, 1¼"-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2½" openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering traps, specify 1¼" or 1½" inlet nut. If not specified 1¼" nut will be furnished.



Woodward Wanger Co.



ANTI-SYPHON "S" TRAPS

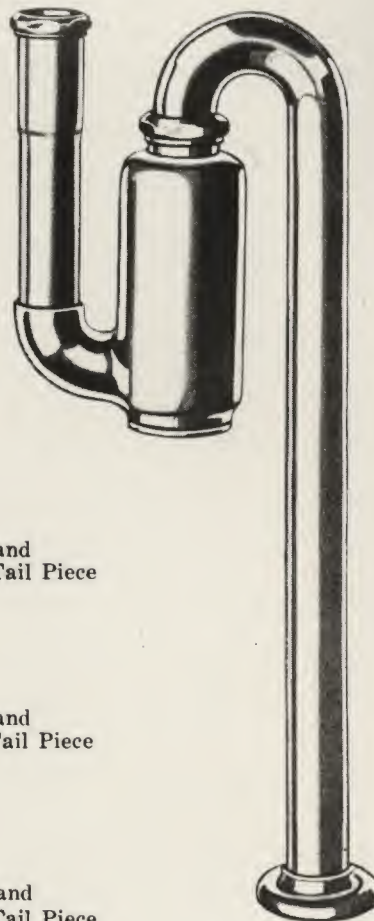
Centrifugal Pattern

Cast Body, Ground Joint, Cast Nuts,

Bent Floor Tube, with Cleanout.

Deep Flange.

Regular Length—20½ Inches.



20 Gauge 1¼" With 6" Body

Nickel Plated	Mirror Chrome	
20-6330 N.P.	20-6330-C	Less Connection
20-6332 N.P.	20-6332-C	With No. 3650 P.O. Plug
20-6333 N.P.	20-6333-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1¼" With 6" Body

Nickel Plated	Mirror Chrome	
17-6330 N.P.	17-6330-C	Less Connection
17-6332 N.P.	17-6332-C	With No. 3650 P.O. Plug
17-6333 N.P.	17-6333-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1½" With 6" Body

Nickel Plated	Mirror Chrome	
20-6335 N.P.	20-6335-C	Less Connection
20-6337 N.P.	20-6337-C	With No. 3650 P.O. Plug
20-6338 N.P.	20-6338-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1½" With 6" Body

Nickel Plated	Mirror Chrome	
17-6335 N.P.	17-6335-C	Less Connection
17-6337 N.P.	17-6337-C	With No. 3650 P.O. Plug
17-6338 N.P.	17-6338-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece

No. 3650 Cast Brass P. O. Plug 2¾" long,
1¼"-20 gauge Wrought Brass Tail Piece.
Can be furnished 6", 8" and 12" long. (See
page 9.) The No. 4265 Sink Strainer has 3"
diameter flange for sinks with 2" to 2½"
openings and can be furnished with 17 and 22
gauge Tail Pieces 4", 6", 8 and 12" long.
(See page 16.)



When ordering traps, specify 1¼" or 1½" inlet nuts. If not specified 1¼" nut will be furnished.



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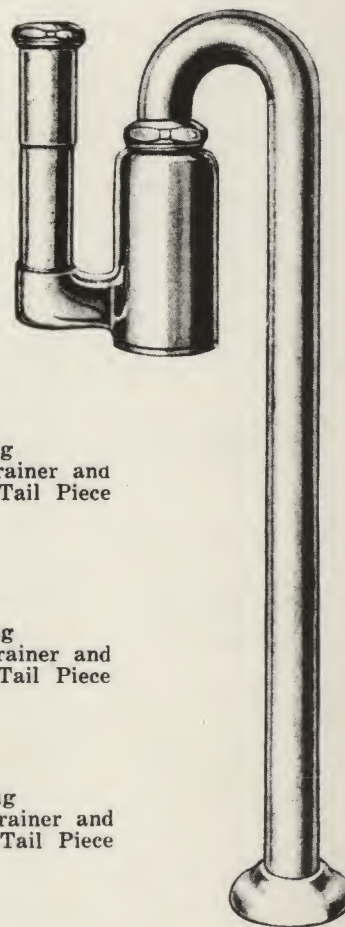


ANTI-SYPHON "S" TRAPS

EXTRA LONG—6" Longer Than Regular.

Centrifugal Pattern

Cast Body, Ground Joint, Cast Nuts,
Bent Floor Tube, With Cleanout.
Deep Flange.



20 Gauge 1 $\frac{1}{4}$ " With 5" Body

Nickel Plated
L-20-6355 N.P.
L-20-6357 N.P.
L-20-6358 N.P.

Mirror Chrome
L-20-6355-C
L-20-6357-C
L-20-6358-C

Less connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and
No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With 5" Body

Nickel Plated
L-17-6355 N.P.
L-17-6357 N.P.
L-17-6358 N.P.

Mirror Chrome
L-17-6355-C
L-17-6357-C
L-17-6358-C

Less connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and
No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With 5" Body

Nickel Plated
L-20-6360 N.P.
L-20-6362 N.P.
L-20-6363 N.P.

Mirror Chrome
L-20-6360-C
L-20-6362-C
L-20-6363-C

Less connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and
No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With 5" Body

Nickel Plated
L-17-6360 N.P.
L-17-6362 N.P.
L-17-6363 N.P.

Mirror Chrome
L-17-6360-C
L-17-6362-C
L-17-6363-C

Less connection
With No. 3650 P.O. Plug
With No. 4265 Sink Strainer and
No. 4278 Tail Piece



No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nuts. If not specified 1 $\frac{1}{4}$ " nut will be furnished.



Woodward Wanger Co.

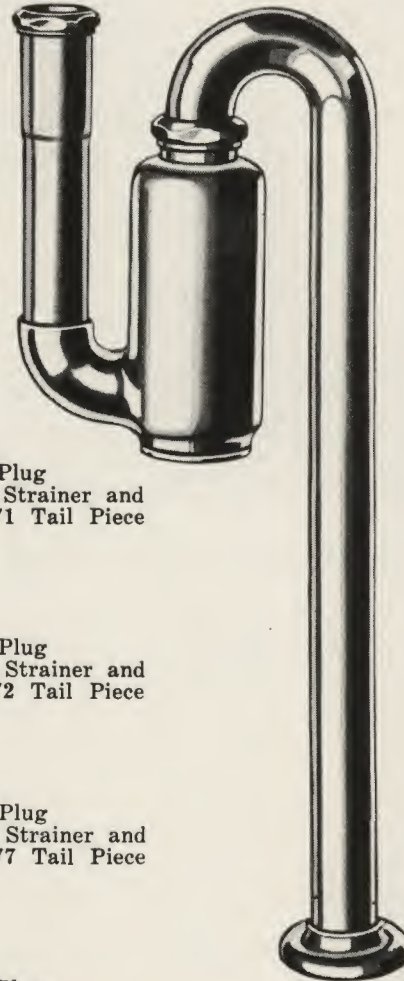


ANTI-SYPHON "S" TRAPS

EXTRA LONG—6" Longer Than Regular.

Centrifugal Pattern

Cast Body, Ground Joint, Cast Nuts,
Bent Floor Tube, With Cleanout.
Deep Flange.



20 Gauge 1 $\frac{1}{4}$ " With 6" Body

Nickel Plated	Mirror Chrome	
L-20-6365 N.P.	L-20-6365-C	Less connection
L-20-6367 N.P.	L-20-6367-C	With No. 3650 P.O. Plug
L-20-6368 N.P.	L-20-6368-C	With No. 4265 Sink Strainer and No. 4271 Tail Piece

17 Gauge 1 $\frac{1}{4}$ " With 6" Body

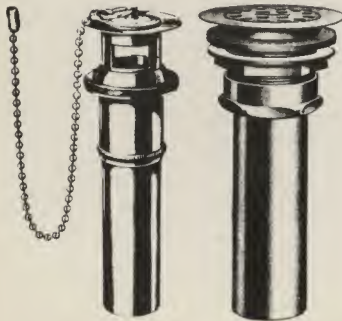
Nickel Plated	Mirror Chrome	
L-17-6365 N.P.	L-17-6365-C	Less connection
L-17-6367 N.P.	L-17-6367-C	With No. 3650 P.O. Plug
L-17-6368 N.P.	L-17-6368-C	With No. 4265 Sink Strainer and No. 4272 Tail Piece

20 Gauge 1 $\frac{1}{2}$ " With 6" Body

Nickel Plated	Mirror Chrome	
L-20-6370 N.P.	L-20-6370-C	Less connection
L-20-6372 N.P.	L-20-6372-C	With No. 3650 P.O. Plug
L-20-6373 N.P.	L-20-6373-C	With No. 4265 Sink Strainer and No. 4277 Tail Piece

17 Gauge 1 $\frac{1}{2}$ " With 6" Body

Nickel Plated	Mirror Chrome	
L-17-6370 N.P.	L-17-6370-C	Less connection
L-17-6372 N.P.	L-17-6372-C	With No. 3650 P.O. Plug
L-17-6373 N.P.	L-17-6373-C	With No. 4265 Sink Strainer and No. 4278 Tail Piece



No. 3650 Cast Brass P.O. Plug 2 $\frac{3}{4}$ " long, 1 $\frac{1}{4}$ "-20 gauge Wrought Brass Tail Piece. Can be furnished 6", 8" and 12" long. (See page 9.) The No. 4265 Sink Strainer has 3" diameter flange for sinks with 2" to 2 $\frac{1}{2}$ " openings and can be furnished with 17 and 22 gauge Tail Pieces 4", 6", 8" and 12" long. (See page 16.)

When ordering traps, specify 1 $\frac{1}{4}$ " or 1 $\frac{1}{2}$ " inlet nuts. If not specified 1 $\frac{1}{4}$ " nut will be furnished.

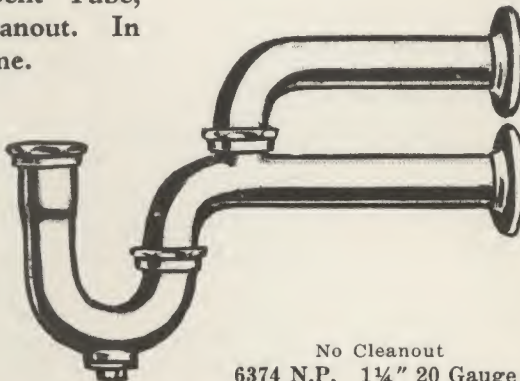


Woodward Wanger Co.



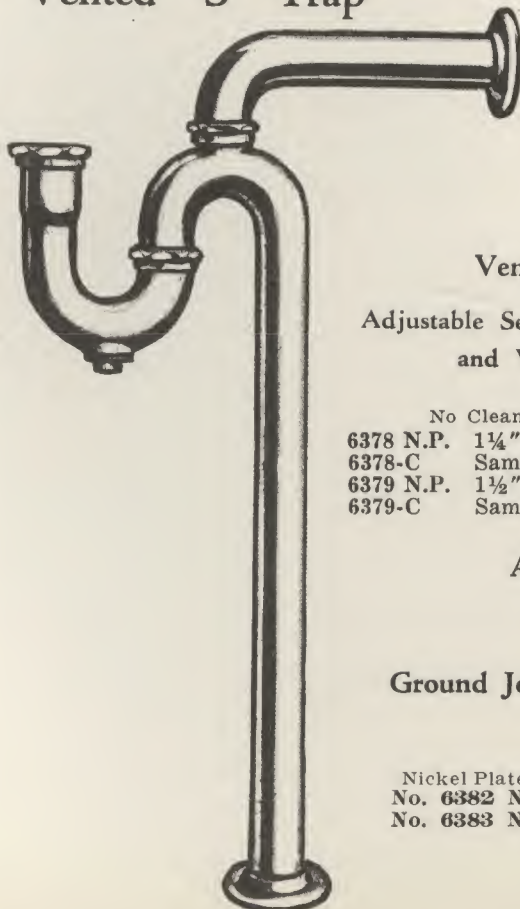
Vented "P" Traps

Adjustable Seamless Bent Tube,
With and Without Cleanout. In
Nickel Plate and Chrome.



No Cleanout		With Cleanout	
6374 N.P.	1¼" 20 Gauge	6376 N.P.	1¼" 20 Gauge
6374-C	Same in Chrome	6376-C	Same in Chrome
6375 N.P.	1½" 20 Gauge	6377 N.P.	1½" 20 Gauge
6375-C	Same in Chrome	6377-C	Same in Chrome

Vented "S" Trap



All Cast Body "S" Trap

Vented "S" Trap

Adjustable Seamless Bent Tube, With
and Without Cleanout.

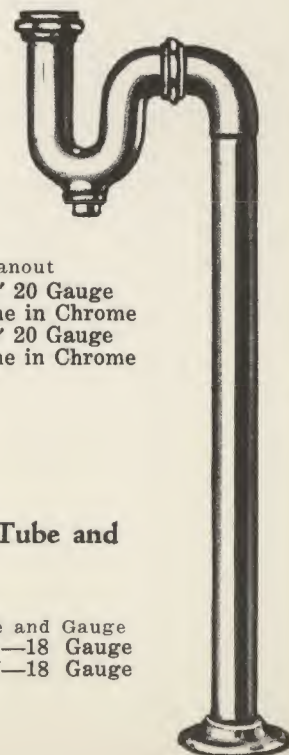
No Cleanout		With Cleanout	
6378 N.P.	1¼" 20 Gauge	6380 N.P.	1¼" 20 Gauge
6378-C	Same in Chrome	6380-C	Same in Chrome
6379 N.P.	1½" 20 Gauge	6381 N.P.	1½" 20 Gauge
6379-C	Same in Chrome	6381-C	Same in Chrome

All Cast Body "S" Trap

Kansas City Code

Ground Joint, Cast Ell with Floor Tube and
Cleanout

Nickel Plated	Mirror Chrome	Size and Gauge
No. 6382 N.P.	No. 6382-C	.....1¼"—18 Gauge
No. 6383 N.P.	No. 6383-C	.....1½"—18 Gauge



When ordering 1½" traps, specify 1¼" or 1½" inlet nut. If not specified 1¼" nut will be furnished.

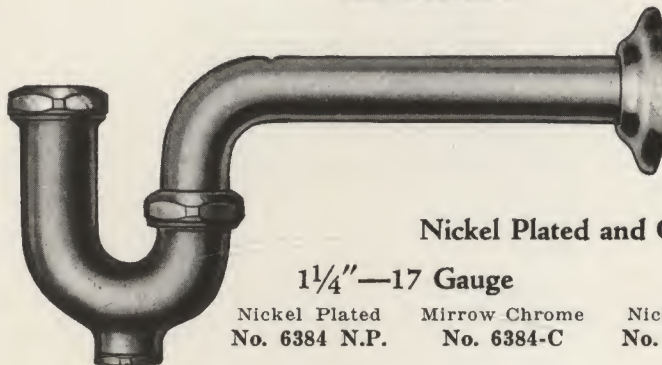


Woodward Wanger Co.



Adjustable
All Cast Body "P" Trap

Bent Wall Tube, Deep Flange.
with Cleanout.



Nickel Plated and Chrome

1 1/4" — 17 Gauge

Nickel Plated
No. 6384 N.P.

Mirror Chrome
No. 6384-C

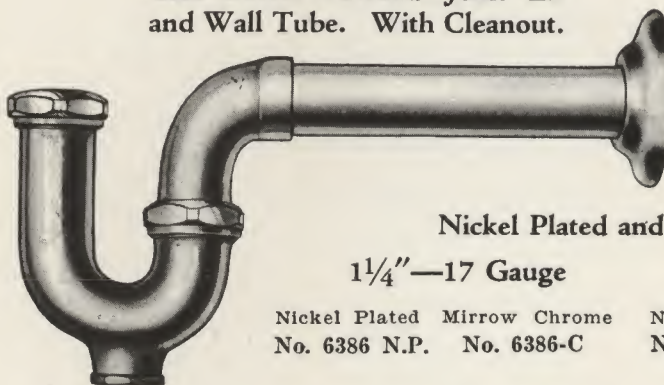
1 1/2" — 17 Gauge

Nickel Plated
No. 6385 N.P.

Mirror Chrome
No. 6385-C

Adjustable All Cast Body "P" Trap

Cast Swivel Ground Joint Ell
and Wall Tube. With Cleanout.



Nickel Plated and Chrome

1 1/4" — 17 Gauge

Nickel Plated
No. 6386 N.P.

Mirror Chrome
No. 6386-C

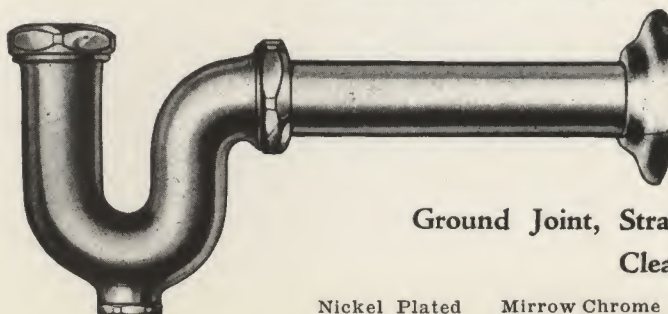
1 1/2" — 17 Gauge

Nickel Plated
No. 6387 N.P.

Mirror Chrome
No. 6387-C

Kansas City Code

All Cast Body "P" Trap



Ground Joint, Straight Wall Tube, with
Cleanout.

Nickel Plated	Mirror Chrome	Size	Gauge
No. 6388 N.P.	No. 6388-C	1 1/4"	18 Gauge
No. 6389 N.P.	No. 6389-C	1 1/2"	18 Gauge

When ordering 1 1/2" trap, specify 1 1/4" or 1 1/2" inlet nut. When not specified 1 1/4" nut will be furnished.



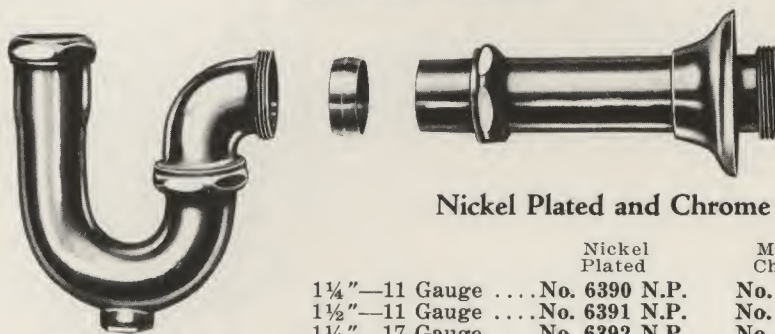
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Special Code Traps

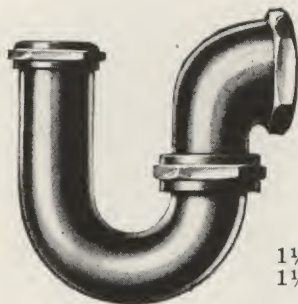
Milwaukee Code

Bent Tube Inlet, Tubing Outlet, Ground Joint and Cleanout.



Nickel Plated and Chrome

	Nickel Plated	Mirror Chrome
1¼"—11 Gauge	No. 6390 N.P.	No. 6390-C
1½"—11 Gauge	No. 6391 N.P.	No. 6391-C
1¼"—17 Gauge	No. 6392 N.P.	No. 6392-C
1½"—17 Gauge	No. 6393 N.P.	No. 6393-C



Los Angeles Code

All Cast Brass with Ground Joint I.P.S.
Swivel Ell. No Cleanout.

	Rough Nickel	Nickel Plated	Mirror Chrome
1¼"x1¼" I.P.S. Outlet	No. 6404 R.N.	No. 6404 N.P.	No. 6404-C
1½"x1½" I.P.S. Outlet	No. 6405 R.N.	No. 6405 N.P.	No. 6405-C

When ordering 1½" traps, specify 1¼" or 1½" inlet nut. If not specified 1¼" nut will be furnished.



Fort Worth Code

All Cast Brass with Ground Joint I.P.S.
Swivel Joint. With Cleanout.

	Rough Nickel	Nickel Plated	Mirror Chrome
1¼"x1¼" I.P.S. Outlet	No. 6406 R.N.	No. 6406 N.P.	No. 6406-C
1½"x1½" I.P.S. Outlet	No. 6407 R.N.	No. 6407 N.P.	No. 6407-C

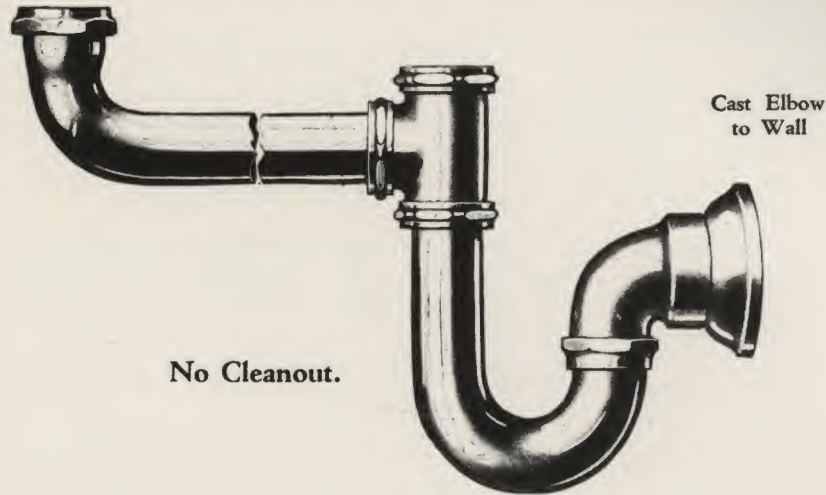
When ordering 1½" traps, specify 1¼" or 1½" inlet nut. If not specified 1¼" nut will be furnished.



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Sink and Wash Tray Combinations



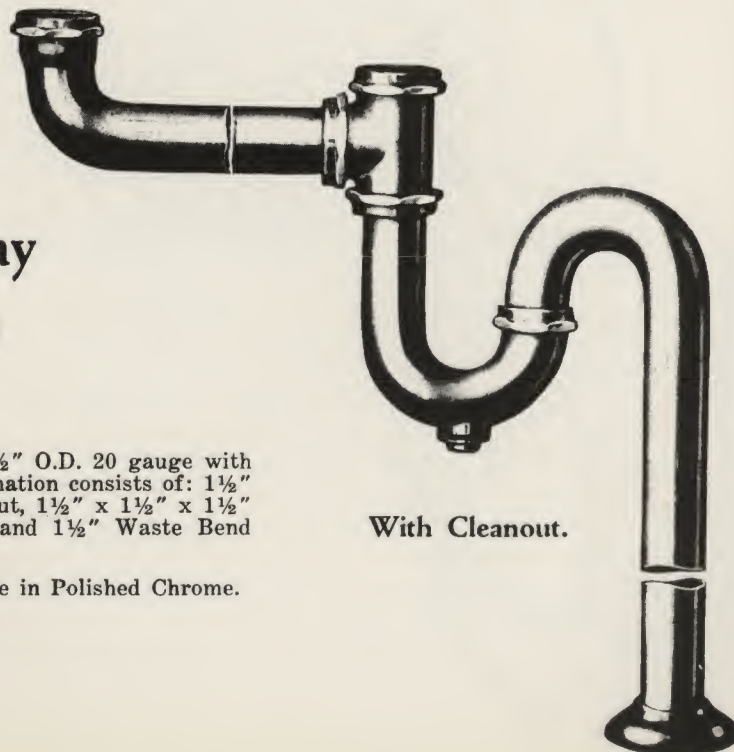
Cast Elbow
to Wall

No Cleanout.

No. 6457 D.N. Dipped Nickel $1\frac{1}{2}$ " O.D., 20 gauge, no Cleanout. Combination consists of: $1\frac{1}{2}$ " Trap less Cleanout, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ " Cast Brass Tee, $1\frac{1}{2}$ " Waste Bend (30" centers).

No. 6457-C Same as the above in Polished Chrome.

Sink and Wash Tray Combinations



With Cleanout.

No. 6458 D.N. Dipped Nickel, $1\frac{1}{2}$ " O.D. 20 gauge with Cleanout. Combination consists of: $1\frac{1}{2}$ " Trap with Cleanout, $1\frac{1}{2}$ " x $1\frac{1}{2}$ " x $1\frac{1}{2}$ " Cast Brass Tee, and $1\frac{1}{2}$ " Waste Bend (30" centers).

No. 6458-C Same as the above in Polished Chrome.

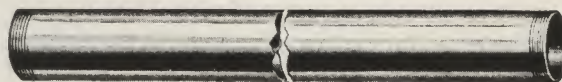


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Parts for Sink and Tray Waste Combinations

1 1/2" Wrought Straight Waste Tube Threaded Both Ends

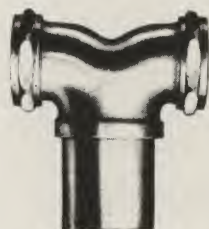


20 Gauge
Satin Nickel
No. 6459A —16 7/8"
No. 6459B —24 3/8"
No. 6459D —27 3/8"

20 Gauge
Nickel Plated
No. 6460A —16 7/8"
No. 6460B —24 3/8"
No. 6460D —27 3/8"

20 Gauge
Polished Chrome
No. 6461A —16 7/8"
No. 6461B —24 3/8"
No. 6461D —27 3/8"

1-1/2" Cast Brass Twin Ell



No. 6462 N.P. Nickel Plated with 2" Tail Piece.

No. 6462-C Same in Chrome.

No. 6463 N.P. Nickel Plated with 1 1/2" Tail Piece.

No. 6463-C Same in Chrome.

Cast Brass Tee Y



No. 6464 N.P. Nickel Plated, 1 1/2" x 1 1/2" x 2", with 2" Tail Piece

No. 6464-C Same in Chrome.

Cast Brass Tee



No. 6465 N.P. Nickel Plated, 1 1/2" x 1 1/2" x 1 1/2" Slip Joint.

No. 6465-C Same in Chrome.

Cast Brass Elbow With Cleanout.



No. 6466 N.P. Nickel Plated, 1 1/2" Slip Joint x 1 1/2" Fine Thread.

No. 6466-C Same in Chrome.

Cast Brass Tee



No. 6467 N.P. Nickel Plated, 1 1/2" x 1 1/2" Slip Joint x 1 1/2" x 4" Tail Piece.

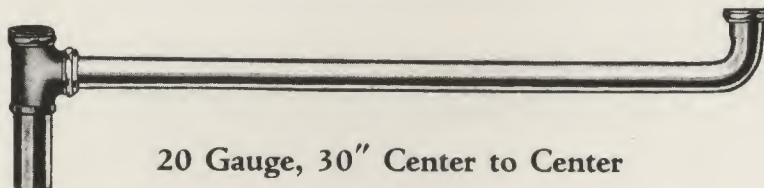
No. 6467-C Same in Chrome.



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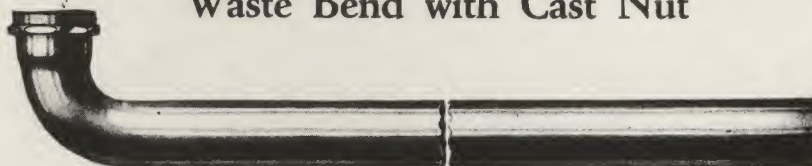
Parts for Sink and Tray Waste Combinations



20 Gauge, 30" Center to Center

No. 6468 R.N.— $1\frac{1}{2}$ O.D. Satin Nickel Finish
No. 6468 N.P.— $1\frac{1}{2}$ O.D. Polished Nickel Finish
No. 6468-C — $1\frac{1}{2}$ O.D. Polished Chrome Finish

$1\frac{1}{2}$ " Wrought Waste Bend with Cast Nut



All 20 Gauge

12" Long	18" Long	29" Long
No. 6469 R.N.	No. 6469 $\frac{1}{2}$ R.N.	No. 6470 R.N.
No. 6469 N.P.	No. 6469 $\frac{1}{2}$ N.P.	No. 6470 N.P.
No. 6469-C	No. 6469 $\frac{1}{2}$ -C	No. 6470-C

$1\frac{1}{2}$ " Continuous Waste Extension with Cast Brass Tee



25" Center to End

No. 6471 R.N. $1\frac{1}{2}$ " 20 Gauge Tube—Rough Nickel
No. 6471 N.P. $1\frac{1}{2}$ " 20 Gauge Tube—Nickel Plated
No. 6471-C $1\frac{1}{2}$ " 20 Gauge Tube—Mirror Chrome



Sink and Wash Tray Combinations

Combination 1½" — 20 Gauge . with 1½" Trap

This consists of

- 1½" Cast Brass New York Regulation Trap
- 1½" Cast Brass Tee with 1½" Tailpiece
- 1½" Waste Bend (30" centers)
- Wrought Sink Strainer with 12" Tailpiece
- Wrought Tray Plug with 4" Tailpiece
- Wrought 1½" I.P.S. Flange

- No. 6472 R.N. Rough Nickel Finish
- No. 6472 N.P. Nickel Plated Finish
- No. 6472-C Chrome Plated Finish



Combination 1½" — 20 Gauge . with 2" Trap

Same as above but with
a 2" Trap.

- No. 6473 R.N., Rough Nickel, No. 6473 N.P., Nickel Plated,
- No. 6473-C, Chrome Plated

Combination 1½" — 20 Gauge . with 1½" Trap

This consists of

- 1½" Cast Brass New York Regulation Trap
- Cast Brass Twin Ell with 1½" Tailpiece
- 1½" Waste Bend 15" long
- 1½" Waste Bend 12" long
- Wrought Sink Strainer with 12" Tailpiece
- Wrought Tray Plug with 4" Tailpiece
- Wrought 1½" I.P.S. Flange

- No. 6474 R.N. Rough Nickel Finish
- No. 6474 N.P. Nickel Plated Finish
- No. 6474-C Chrome Plated Finish



Combination 1½" — 20 Gauge with 2" Trap

Same as above but with
a 2" Trap.

- No. 6475 R.N. Rough Nickel Finish
- No. 6475 N.P. Nickel Plated Finish
- No. 6475-C Chrome Plated Finish

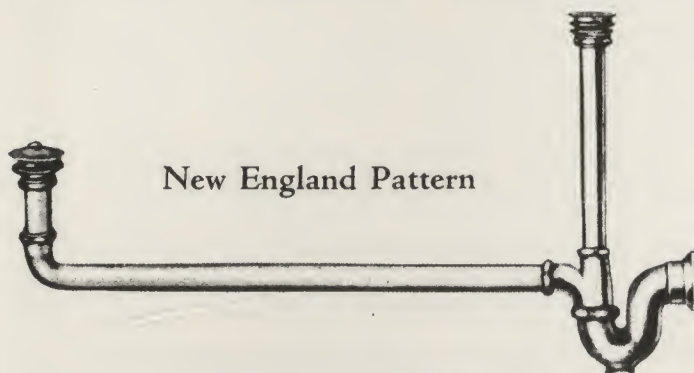




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Sink and Wash Tray Combinations



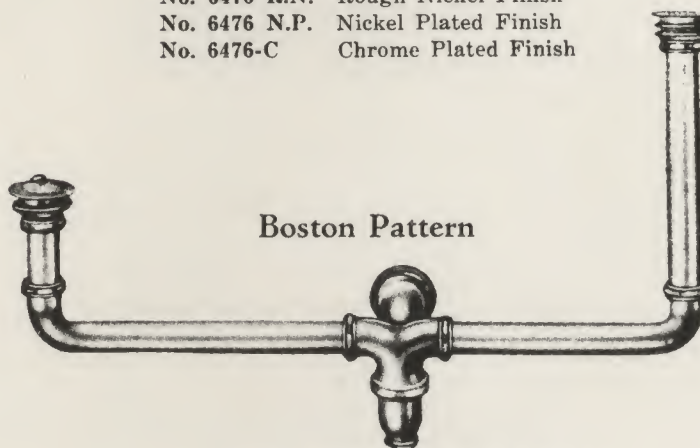
New England Pattern

Combination 1½" No. 20 B & S Ga.

This consists of

- 2" Cast Brass Trap with Swivel Tee
- 1½" No. 20 B & S Ga. Waste Bend (30" centers)
- Wrought Sink Strainer with 12" Tailpiece
- Wrought Tray Plug with 4" Tailpiece
- Wrought 2" I.P.S. Flange

No. 6476 R.N. Rough Nickel Finish
No. 6476 N.P. Nickel Plated Finish
No. 6476-C Chrome Plated Finish



Boston Pattern

Combination 1½" No. 20 B & S Ga.

This consists of

- 2" Cast Brass Trap with Swivel Twin Ell
- 1½" No. 20 B & S Ga. Waste Bend (15" long)
- 1½" No. 20 B & S Ga. Waste Bend (12" long)
- Wrought Sink Strainer with 12" Tailpiece
- Wrought Tray Plug with 4" Tailpiece
- Wrought 2" I.P.S. Flange

No. 6477 R.N. Rough Nickel Finish
No. 6477 N.P. Nickel Plated Finish
No. 6477-C Chrome Plated Finish



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Bath Waste and Overflow

For Semi-concealed Work

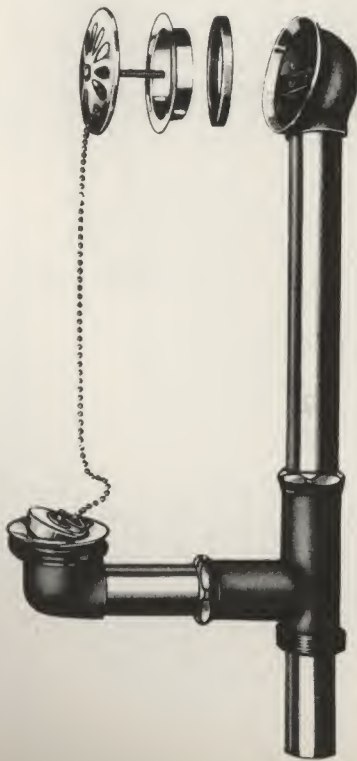
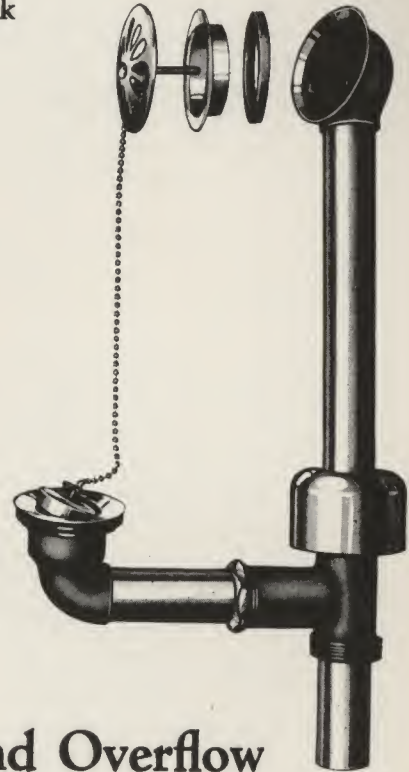
Size $1\frac{3}{8}$ " O.D.—22 Gauge

Patented Head, Adjustable to Fit
Any Pitch of Tub.

Furnished with an adjustable Cast Tee Body threaded $1\frac{1}{2}$ " I.P.S. O.D. on outlet end and screwed in Tail Piece, Cast Top Elbow adjustable to any pitch tub, deep Cast Bottom Elbow, Heavy Wrought Top and Bottom Strainers, Deep Box Flange, Bead Chain, Rubber Stopper and Bevel Lead Slip Joint Washers.

No. 6478 N.P. Exposed Parts N.P.,
also Top Elbow and Over-Flow Tube.
Other parts unfinished.

No. 6478-C Same in Chromium Plate.



Bath Waste and Overflow

For Concealed Work

Size $1\frac{3}{8}$ " O.D.—17 Gauge

Patented Head, Adjustable to Fit
Any Pitch of Tub.

Furnished with an adjustable Cast Tee Body threaded $1\frac{1}{2}$ " I.P.S. O.D. on outlet end and screwed in Tail Piece, Cast Top Elbow adjustable to any pitch tub, Cast Bottom Elbow, Bevel Lead Slip Joint Washers, Heavy Wrought Top and Bottom Strainers, Bead Chain and Rubber Stopper.

No. 6479 N.P.—17 Gauge. Polished Nickel top and Bottom, Strainers and Chain. Other parts unfinished.

No. 6479-C—17 Gauge. Polished Chrome top and Bottom, Strainers and Chain. Other parts unfinished.



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Connected Waste and Overflow For Open Work

Size $1\frac{3}{8}$ " O.D.—22 Gauge

Patented Head, Adjustable to Fit
Any Pitch of Tub.

Furnished with adjustable Cast Tee Body, Cast Top Elbow adjustable to any pitch tub, Cast Bottom Elbow, Heavy Wrought Top and Bottom Strainer, Saw Tooth Flange, Bead Chain and Rubber Stopper.

No. 6480 R.N. Castings and Tubes Satin Nickel Finish.

No. 6480 N.P. All Castings Satin Nickel, Tubes Polished Nickel.

No. 6480-C All Castings Satin Chrome, Tubes Polished Chrome.

Size $1\frac{3}{8}$ " O.D.—17 Gauge

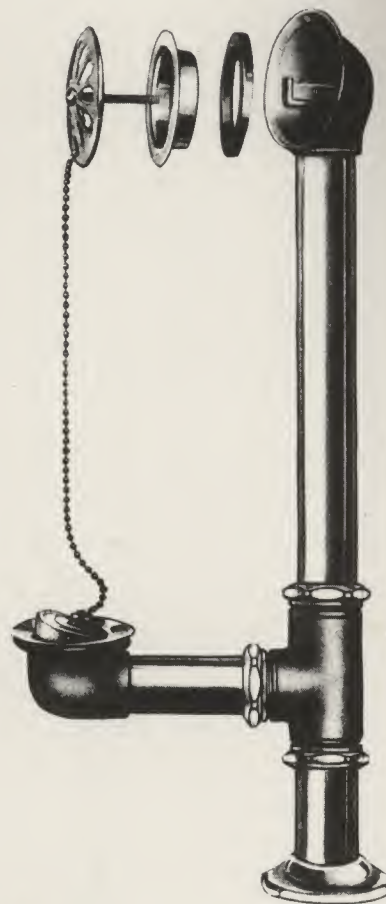
Patented Head, Adjustable to Fit
Any Pitch of Tub.

Furnished with adjustable Cast Tee Body, Cast Top Elbow adjustable to any pitch tub, Cast Bottom Elbow, Heavy Wrought Top and Bottom Strainer, Saw Tooth Flange, Bead Chain and Rubber Stopper.

No. 6481 R.N. Castings and Tubes Satin Nickel Finish.

No. 6481 N.P. All Castings and Tubes Polished Nickel.

No. 6481-C All Castings and Tubes Polished Chrome.



Combined Adjustable Waste and Overflow with Trap

Size $1\frac{3}{8}$ " O.D.—22 Gauge

No. 6482 N.P. Cast Top and Bottom Elbows, Cast Hexagon Nuts and Heavy Flanges. Provided with Adjustments to fit all tubs, and has deep water seal.

No. 6482-C Same in Chrome finish.



Roughing—Adjustable to any tub dimension.



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Basin Waste

Nickel Plated and Chrome Plated



$1\frac{1}{4}$ " O.D. Tube
24" Long

No.	Description
6483 N.P.	—22 Gauge, Nickel Plated, Less Plug.
6483-C	—Same in Chrome.
6484 N.P.	—22 Gauge, Nickel Plated, WITH Plug.
6484-C	—Same in Chrome.

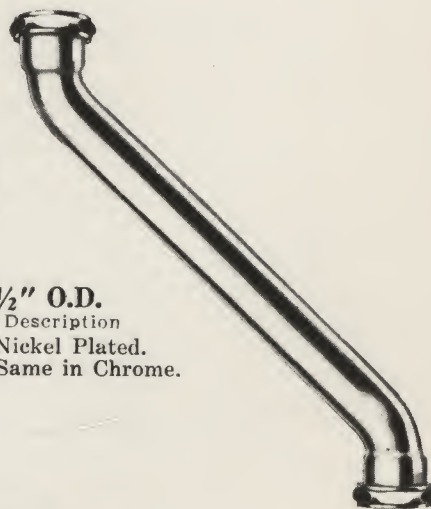
$1\frac{1}{2}$ " O.D. Tube
24" Long

No.	Description
6485 N.P.	—22 Gauge, Nickel Plated, Less Plug.
6485-C	—Same in Chrome.
6486 N.P.	—22 Gauge, Nickel Plated, WITH Plug.
6486-C	—Same in Chrome.

Trap Offset

Nickel Plated and Chrome

Height $11\frac{1}{2}$ ". Furnished with two (2) Cast Brass Nuts and Rubber Washers. Slip ends made $1\frac{1}{2}$ " Deep. Offset $7\frac{3}{4}$ ".



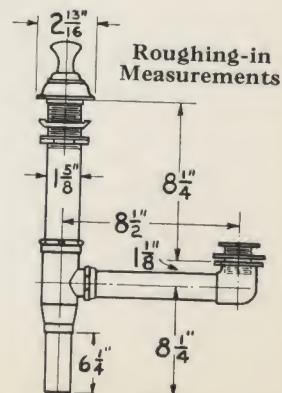
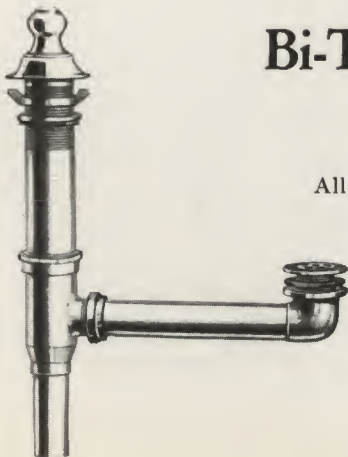
No.	Description
6487 N.P.	—Nickel Plated.
6487-C	—Same in Chrome.

No.	Description
6488 N.P.	—Nickel Plated.
6488-C	—Same in Chrome.

Bi-Transit Basin Waste

No. 6489-C

All Polished Chrome above the Lavatory,
Satin Chrome below the Lavatory.



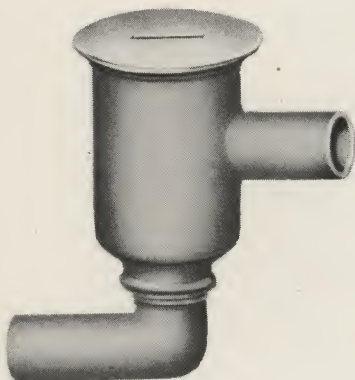


Woodward Wanger Co.

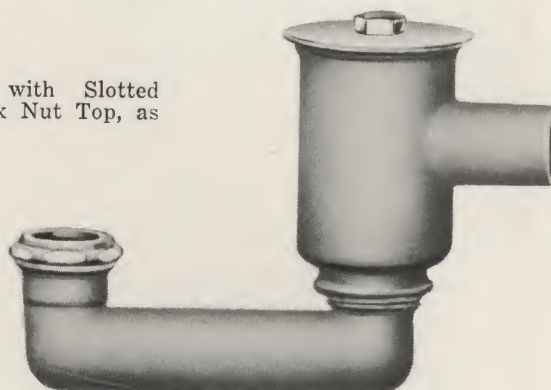


Cast Brass Bath Traps

Improved Pattern



Furnished with Slotted Top or Hex Nut Top, as desired.



With 4" Return Bend

No.	Inlet for	Outlet for
6490	1½" L.P.	1½" Lead Pipe
6490A	1½" I.P. Male	1½" I.P. Male
6490B	1½" I.P. Female	1½" I.P. Female

No.	Inlet for	Outlet for
6491	1½" Tube	1½" Lead Pipe
6491A	1½" Tube	1½" I.P. Male
6491B	1½" Tube	1½" I.P. Female

With 6" Return Bend

No.	Inlet for	Outlet for
6491D	1½" Tube	1½" Lead Pipe
6491E	1½" Tube	1½" I.P. Male
6491F	1½" Tube	1½" I.P. Female

Cast Brass Bath Traps

17 Gauge Chrome Inlet Tube

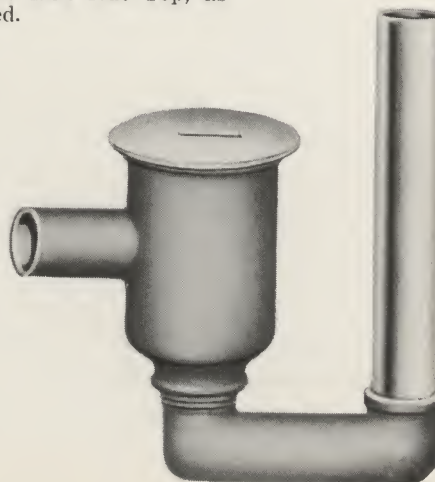
With 4" Return Bend

No.	Inlet Tube	Outlet for
6492	1⅝" O.D.	1½" Lead Pipe
6492A	1½" O.D.	1½" Lead Pipe
6492B	1⅝" O.D.	1½" I.P. Male
6492D	1½" O.D.	1½" I.P. Male
6492E	1⅝" O.D.	1½" I.P. Female
6492F	1½" O.D.	1½" I.P. Female

With 6" Return Bend

No.	Inlet Tube	Outlet for
6492G	1⅝" O.D.	1½" Lead Pipe
6492H	1½" O.D.	1½" Lead Pipe
6492J	1⅝" O.D.	1½" I.P. Male
6492K	1½" O.D.	1½" I.P. Male
6492L	1⅝" O.D.	1½" I.P. Female
6492M	1½" O.D.	1½" I.P. Female

Furnished with Slotted Top or Hex Nut Top, as desired.

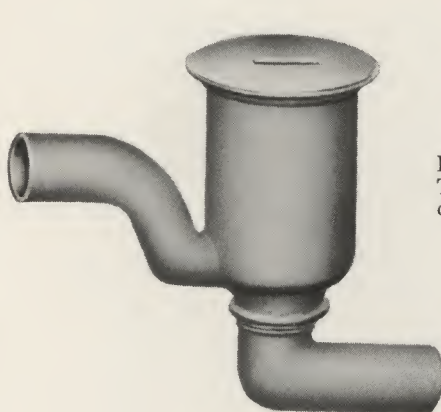




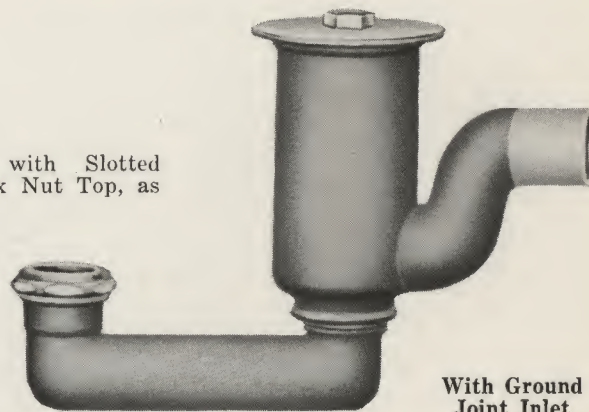
Woodward Wanger Co.



Cast Brass Bath Traps



Furnished with Slotted
Top or Hex Nut Top, as
desired.



With Ground
Joint Inlet

No.	Inlet for	Outlet for
6493	1½" Lead Pipe	1½" Lead Pipe
6493A	1½" I.P. Male	1½" I.P. Male
6493B	1½" I.P. Female	1½" I.P. Female

With 4" Return Bend

No.	Inlet for	Outlet for
6494	1½" Tube	1½" Lead Pipe
6494A	1½" Tube	1½" I.P. Male
6494B	1½" Tube	1½" I.P. Female

With 6" Return Bend

No.	Inlet for	Outlet for
6494D	1½" Tube	1½" Lead Pipe
6494E	1½" Tube	1½" I.P. Male
6494F	1½" Tube	1½" I.P. Female

Cast Brass Bath Traps

17 Gauge Chrome Inlet Tube

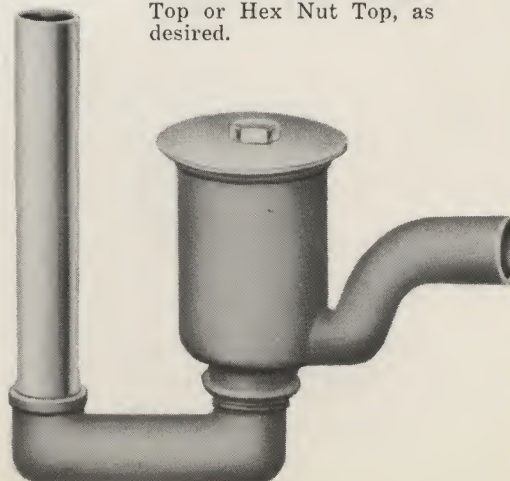
With 4" Return Bend

No.	Inlet Tube	Outlet for
6495	1¾" O.D.	1½" Lead Pipe
6495A	1½" O.D.	1½" Lead Pipe
6495B	1¾" O.D.	1½" I.P. Male
6495D	1½" O.D.	1½" I.P. Male
6495E	1¾" O.D.	1½" I.P. Female
6495F	1½" O.D.	1½" I.P. Female

With 6" Return Bend

No.	Inlet Tube	Outlet for
6495G	1¾" O.D.	1½" Lead Pipe
6495H	1½" O.D.	1½" Lead Pipe
6495J	1¾" O.D.	1½" I.P. Male
6495K	1½" O.D.	1½" I.P. Male
6495L	1¾" O.D.	1½" I.P. Female
6495M	1½" O.D.	1½" I.P. Female

Furnished with Slotted
Top or Hex Nut Top, as
desired.



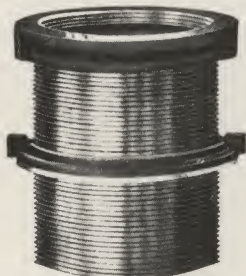


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Parts for Improved Cast Brass Bath Traps

Extension Sleeve with Lock Nut



Fits all Bath Traps Shown. Threaded for Trap cover and threaded to enter top of trap.

No. 6496 3" long

Inlet Return Bend

With Ground Joint Brass Connection



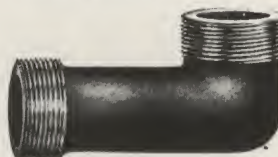
No.	Center	Slip Joint	Threaded
6498	... 6"	1½"	1½" I.P.
6498A	... 8"	1½"	1½" I.P.
6498B	... 10"	1½"	1½" I.P.

Extension Ring



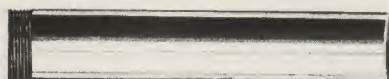
No.	Length
6497	..... ½"
6497A	..... ¾"
6497B	..... 7/8"
6497D	..... 1"
6497E	..... 1¼"
6497F	..... 1½"
6497G	..... 2"

Inlet Elbow



No.	Center to End	Threaded
6499	..... 3¾"	1½" I.P.

Tubes for Cast Brass Bath Traps



17 Gauge Brass Chrome Plated

*This trap tube is a special 1¾" tube with bottom wedged. Threaded 1½" so that return bends tapped 1½" may be connected to 1¾" waste and overflow tees.

No.	Diameter	Length	Threaded
6500	..... 1¾"	8"	1¾"—27
6500A	..... 1½"	8"	1½"—27
* 6500B	..... 1¾"	8"	1½"—27

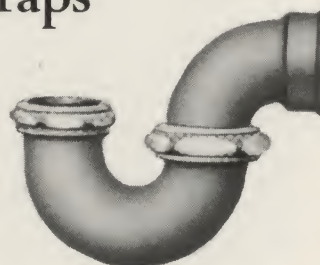
Cast Brass Bath Traps



Female Outlet

No.	Slip Joint Inlet	Tapped
6501	1½"	1½" I.P.

With Visible Ground Joint Inlets



Female Outlet—With Ground Joint Union

No.	Slip Joint Inlet	Outlet
6502	1½"	1½" I.P.
6502A	1¾"	1½" I.P.



Woodward Wanger Co.



Brass Supply Pipes—Basin

One Piece Basin Supply Pipe Annealed
Nickel Plated and Chrome

9/16" O.D.—16 Gauge

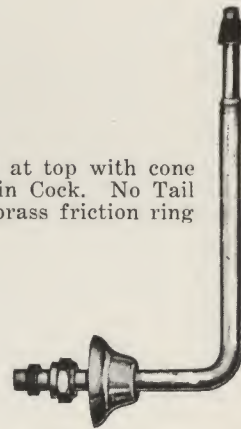
Annealed Seamless Brass $\frac{9}{16}$ " O.D., reduced at top to $\frac{7}{8}$ " and fitted at top with cone shaped rubber washer and brass friction ring for connection to Basin Cock. No Tail piece necessary. Furnished with Slip Joint nut, rubber washer and brass friction ring for Iron Pipe connection at Floor or Wall.

To Floor

No. 6504 N.P.— $\frac{9}{16}$ " O.D., 16 Gauge, 29" overall
No. 6504-C —Same in Chrome finish

To Wall

No. 6506 N.P.— $\frac{9}{16}$ " O.D., 16 Gauge, 10" from end of Basin connection to center of bend, and $6\frac{1}{2}$ " from center of bend to end of Wall connection.
No. 6506-C —Same in Chrome finish



$\frac{3}{8}$ " I.P.—14 Gauge

One Piece Supply Pipes, Annealed
Nickel Plated and Chrome

Annealed Seamless Brass $\frac{3}{8}$ " I.P., reduced at top to $\frac{7}{16}$ " and fitted with cone shaped rubber washer and Brass friction ring for connection to Basin Cock. No Tail Piece necessary. Threaded at bottom for $\frac{3}{8}$ " I.P. connection at Floor or Wall. Furnished with deep heavy flanges.

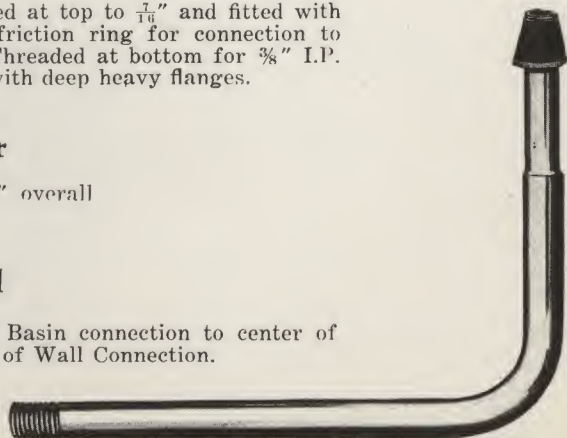
To Floor

No. 6508 N.P.— $\frac{3}{8}$ " I.P.S., 14 Gauge, 29" overall
No. 6508-C —Same in Chrome finish

To Wall

Wall Supplies measure 10" from end of Basin connection to center of bend and $6\frac{1}{2}$ " from center of bend to end of Wall Connection.

No. 6510 N.P.— $\frac{3}{8}$ " I.P.S., 14 Gauge
No. 6510-C —Same in Chrome finish





Woodward Wanger Co.



No. 6511

Brass Supply Pipes—Basin

Semi-Annealed

$\frac{3}{8}$ " I. P.—12 Gauge and -14 Gauge

Semi-Annealed Seamless Brass $\frac{3}{8}$ in. I.P. with $\frac{3}{8}$ x $\frac{1}{4}$ in. Reducing Socket connection to Basin Cock. Threaded at end for $\frac{3}{8}$ in. I.P. connection at Floor or Wall. Furnished with Extra Heavy Flanges.

To Floor

11 Gauge

No. 6511 N.P.—Full $\frac{3}{8}$ " I.P. Size and Weight—26½" long.

No. 6511-C —Same in Chrome.

No. 6511½ N.P.—Full $\frac{3}{8}$ " I.P. Size and Weight—30" long.

No. 6511½-C —Same in chrome.

12 Gauge

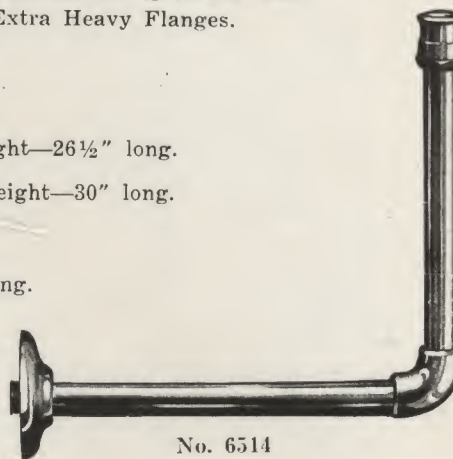
No. 6512 N.P.—Full $\frac{3}{8}$ " I.P. Size—26½" long.

No. 6512-C —Same in Chrome.

14 Gauge

No. 6514 N.P. —Full $\frac{3}{8}$ " I.P. Size—26½" long.

No. 6514-C —Same in Chrome.



No. 6514

To Wall

Wall Supplies measure 9 in. from end of Basin connection to center of Bend and 7 in. from center of Bend to end of Wall connection.

No. 6515 N.P.—Full $\frac{3}{8}$ " I.P. Size 14 Gauge,

No. 6515-C —Same in Chrome.

$\frac{3}{8}$ " I.P.—14 Gauge

Semi-Annealed Seamless Brass $\frac{3}{8}$ in. I.P. with $\frac{3}{8}$ x $\frac{1}{4}$ in. Reducing Socket connection to Basin Cock. Threaded at end for $\frac{3}{8}$ in. I.P. connection at Floor or Wall. Fitted with Wheel Handle Compression Stop. Furnished with Extra Heavy Flanges.

To Floor

No. 6516 N.P.— $\frac{3}{8}$ " I.P., 14 Gauge—26½" long.

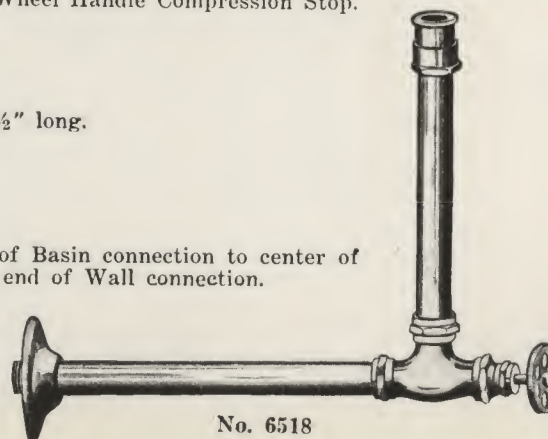
No. 6516-C —Same in Chrome.

To Wall

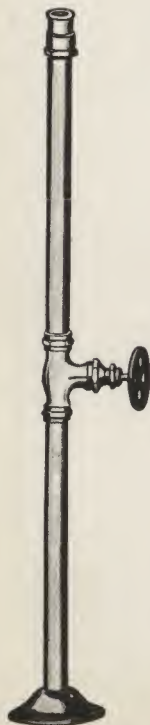
Wall Supplies measure 9 in. from end of Basin connection to center of Bend and 7 in. from center of Bend to end of Wall connection.

No. 6518 N.P. — $\frac{3}{8}$ " I.P., 14 Gauge

No. 6518-C —Same in Chrome.



No. 6518



No. 6516



Woodward Wanger Co.



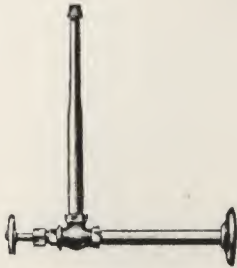
Brass Supply Pipes—Basin

Semi-Annealed

$\frac{3}{8}$ " I.P.—14 Gauge

To Wall

With Wheel Handle Compression Valve



Seamless Brass Tubing, Semi-annealed, $\frac{21}{32}$ " O.D. The Basin end is reduced to $\frac{1}{16}$ " O. D. for 4" of the length. Basin Tube is 10" long. Wall tube is 6" long. Sold complete with beveled slip joint washer and brass friction ring for connection at Basin.

No. 6519 N.P.— $\frac{3}{8}$ " I.P.S., 14 Gauge

No. 6519-C —Same in Chrome finish

Brass Supply Pipe—Closet Tank

Semi-Annealed

$\frac{3}{8}$ " I.P.—14 Gauge

Semi-Annealed Seamless brass tubing $\frac{3}{8}$ " I.P., Threaded at bottom for floor connection and having collar $\frac{13}{16}$ " diameter at top for connection with Ballcock. Supplied with deep heavy flanges.

No. 6530 N.P.— $\frac{3}{8}$ " I.P.S., 14 gauge, 21" long

No. 6530-C —Same in Chrome finish

Brass Supply Pipe—Closet Tank

Semi-Annealed

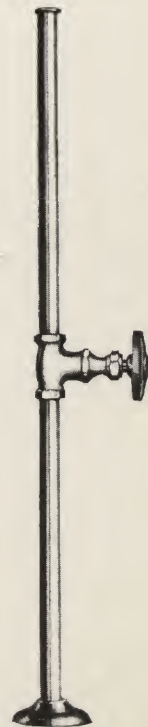
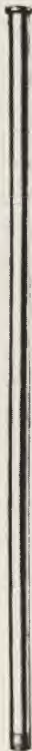
$\frac{3}{8}$ " I.P.—14 Gauge

With Wheel Handle Compression Valve

Semi-Annealed Seamless brass tubing $\frac{3}{8}$ " I.P., Threaded at bottom for floor connection and having collar $\frac{13}{16}$ " diameter at top for connection with Ballcock. Supplied with deep heavy flanges.

No. 6531 N.P.— $\frac{3}{8}$ " I.P.S., 14 gauge, 21" overall

No. 6531-C —Same in Chrome finish





Woodward Wanger Co.

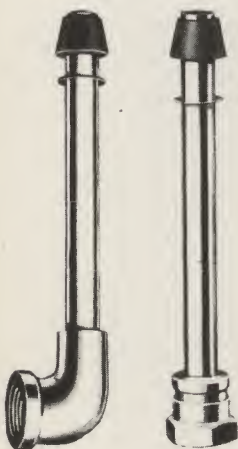


Handy Basin Supply Pipes

Satin Nickel and
Satin Chrome

Special Brazed Brass Tubing, $\frac{7}{16}$ " O.D., fitted with Cone shaped rubber washer and Brass Friction ring for connection to Basin Cock. No Tail piece necessary.

ELBOW TYPE— $\frac{7}{16}$ " O.D.



No.	Finish	Tapped	Length
6534 S.N.	Satin Nickel	$\frac{3}{8}$ " I.P.	5 in.
6534 S.C.	Satin Chrome	$\frac{3}{8}$ " I.P.	5 in.
6534 $\frac{1}{2}$ S.N.	Satin Nickel	$\frac{1}{2}$ " I.P.	5 in.
6534 $\frac{1}{2}$ S.C.	Satin Chrome	$\frac{1}{2}$ " I.P.	5 in.
6535 S.N.	Satin Nickel	$\frac{3}{8}$ " I.P.	8 in.
6535 S.C.	Satin Chrome	$\frac{3}{8}$ " I.P.	8 in.
6535 $\frac{1}{2}$ S.N.	Satin Nickel	$\frac{1}{2}$ " I.P.	8 in.
6535 $\frac{1}{2}$ S.C.	Satin Chrome	$\frac{1}{2}$ " I.P.	8 in.

STRAIGHT TYPE— $\frac{7}{16}$ " O.D.

No.	Finish	Tapped	Length
6536 S.N.	Satin Nickel	$\frac{3}{8}$ " I.P.	5 in.
6536 S.C.	Satin Chrome	$\frac{3}{8}$ " I.P.	5 in.
6536 $\frac{1}{2}$ S.N.	Satin Nickel	$\frac{1}{2}$ " I.P.	5 in.
6536 $\frac{1}{2}$ S.C.	Satin Chrome	$\frac{1}{2}$ " I.P.	5 in.
6537 S.N.	Satin Nickel	$\frac{3}{8}$ " I.P.	8 in.
6537 S.C.	Satin Chrome	$\frac{3}{8}$ " I.P.	8 in.
6537 $\frac{1}{2}$ S.N.	Satin Nickel	$\frac{1}{2}$ " I.P.	8 in.
6537 $\frac{1}{2}$ S.C.	Satin Chrome	$\frac{1}{2}$ " I.P.	8 in.

"S.N." signifies Satin Nickel, "S.C." signifies Satin Chrome (not polished).

Handy Basin Supply

Cast, One Piece

Cast Brass, one piece, supplied with Brass Friction Ring and Cone shaped rubber washer for connection to Basin Cock. Tested to 60 lbs. Air pressure under water.

No.	Finish	O.D.	Tapped	Length
6539 S.N.	Satin Nickel	$\frac{7}{16}$ "	$\frac{3}{8}$ " I.P.	5 $\frac{3}{8}$ " in.
6540 S.N.	Satin Nickel	$\frac{7}{16}$ "	$\frac{1}{2}$ " I.P.	5 $\frac{3}{8}$ " in.

"S.N." signifies Satin Nickel





Woodward Wanger Co.



Brass Supply Pipes—Bath

Nickel or Chrome Plated



No. 6550

45° Offset

9/16" O.D.—16 Gauge

Double Bend

Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Double Bend Offset with Special Cone shaped lead connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep flanges.

No. 6550 N.P.— $\frac{9}{16}$ " O.D., 16 Gauge, 45° Offset, 21½" long.

No. 6550-C —Same in Chrome Finish.

45° Offset

9/16" O.D.—18 Gauge

Double Bend

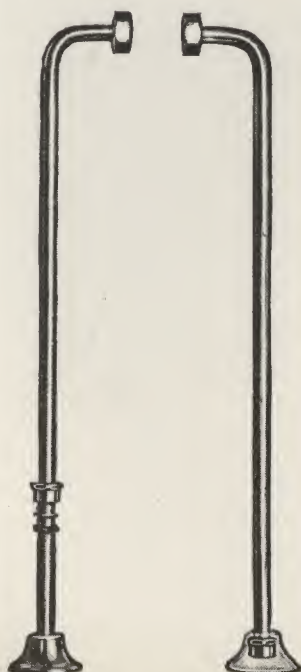
Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Single Bend 45 Degree Offset with Special Cone shaped rubber connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep Flanges.

No. 6556 N.P.— $\frac{9}{16}$ " O.D., 18 Gauge, 45° Offset, 21½" long.

No. 6556-C —Same in Chrome Finish.



No. 6560

90° Offset

9/16" O.D.—16 Gauge

Single Bend

Annealed Seamless Brass Tubing, $\frac{9}{16}$ " O.D., Single Bend 90 Degree Offset with Special Brass Cone shaped connection to Bath Faucet assembled to pipe.

Furnished with Coupling Nut, Slip Nut, Rubber Washer and Friction Ring. Slip Nut for $\frac{1}{2}$ " Iron Pipe connection at floor.

Furnished with extra heavy deep Flanges.

No. 6560 N.P.— $\frac{9}{16}$ " O.D., 16 Gauge, 90° Offset, 21½" long.

No. 6560-C —Same in Chrome Finish.



Woodward Wanger Co.



Brass Supply Pipes—Bath

Nickel Plated and Chrome

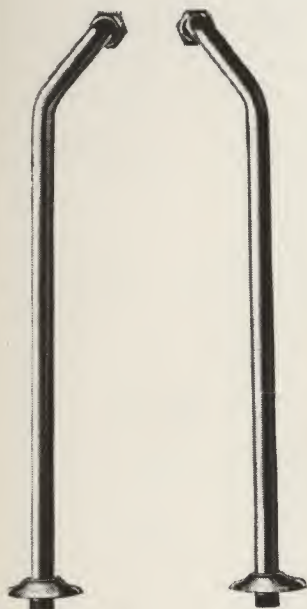
45° Offset
1/2" I.P.—14 Gauge

Double Bend

Made from 1/2" I.P. Annealed Seamless Brass. Finished Nickel Plated or Chrome Finish. Has double bend 45 Degree Offset, with special cone shaped Brass connection. These Supply Pipes are full 1/2" I.P. (3/16" O.D.), in 14 Gauge, and threaded for 1/2" I.P. connection at floor.

Furnished with Coupling Nut for connection to Bath Faucet, and extra deep heavy flanges.

No. 6570 N.P.—1/2" I.P., 14 Gauge, 45° Offset, 21 1/2" long.
No. 6570-C —Same in Chrome Finish.



No. 6570

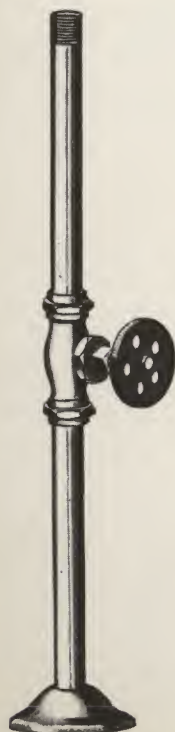
Threaded Both Ends

Brass—Nickel Plated and Chrome

3/8" and 1/2" I.P. Seamless Brass
Semi-Annealed, with Heavy Flanges

No. 6572 N.P.—3/8" I.P., 12 Gauge, 20 1/2" long.
No. 6574 N.P.—1/2" I.P., Full I.P. Size and Weight, 20 1/2" long.
No. 6575 N.P.—1/2" I.P., 12 Gauge, 20 1/2" long.
No. 6576 N.P.—1/2" I.P., 12 Gauge, 22" long.
No. 6580 N.P.—1/2" I.P., 14 Gauge, 20 1/2" long.
No. 6581 N.P.—1/2" I.P., Full I.P. Size and Weight, 24" long.

Use "C" after catalog number if wanted in Chrome.



Bath Supply Pipes—With Stop

Brass—Nickel Plated and Chrome

1/2" I.P.—12 and 14 Gauge

Made from 1/2" I.P. Semi-Annealed Seamless Brass tubing. Threaded both ends 1/2" I.P., and equipped with Wheel Handle Compression stop.

No. 6583 N.P.—1/2" I.P., 12 Gauge, 20 1/2" long.
No. 6585 N.P.—1/2" I.P., 14 Gauge, 20 1/2" long.

Use "C" after catalog number if wanted in Chrome.



Cast Brass - Fine with a few spots



Woodward Wanger Co.

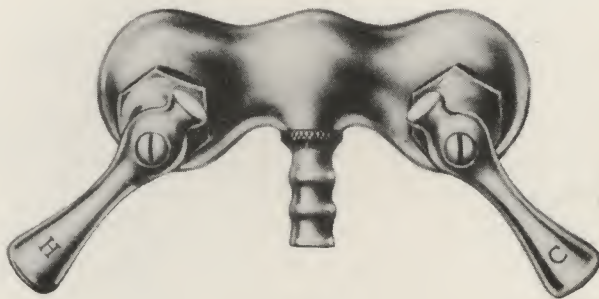


Bath Faucets

Brass—Nickel Plated and Chrome

Less Couplings

With Lever Handle Only



No. 6599

3 3/8" Center to Center

Junior Pattern Front Handle Double Bath Faucet

A well made and finely finished small Bath Faucet, accurately machined and tested under air pressure.

LESS COUPLINGS

No. 6599 N.P.—Furnished with Lock Nuts, less Couplings. With Brass Lever Handles, No. 6515-C (See Page 3 this section.)

No. 6599-C—Same Faucet in Chrome Finish.

Top Handle Double Bath Faucet

Less Couplings

Top Handle

Brass—Chrome Plated

Nos. 6601-6604

A sturdy, well made Bath Faucet, tested under air pressure. Made from high grade metal, accurately machined and beautifully finished. Modern design.

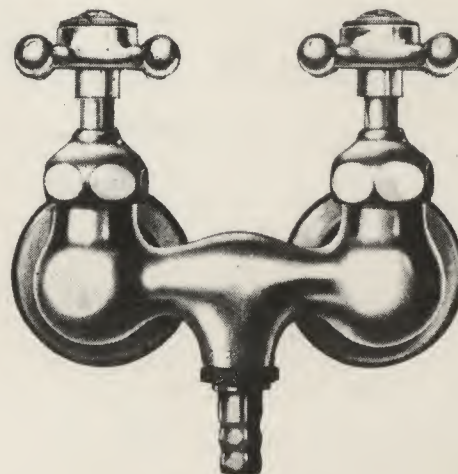
LESS COUPLINGS

No. 6601-C—Furnished with Lock Nuts, less Couplings. Extra heavy Brass Cross handle with Metal Button index. (See No. 6612-C Page 3 this section.)

No. 6602-C—Same with Brass Four Ball Handle, Metal Button Index. (See No. 6613-C Page 3 this section.)

No. 6603-C—Same with Brass Lever Index Handle. (See No. 6615-C Page 3 this section.)

No. 6604-C—Same with Four Arm Metal Index Handle. (See No. 6614-C Page 3 this section.)



Nos. 6601-6604

3 3/8" Center to Center

Important Notice:—For special bath tub drillings, other than the standard 3 3/8", couplings can be furnished (see Page 3 this section) that will suit drillings in tub from 4" to 6 1/2" center to center.



Woodward Wanger Co.



Non-Syphon Bath Faucets

Brass—Chrome Plated

Less Couplings



No. 6605-C

3 3/8" Center to Center

Junior Pattern Front Handle Double Bath Faucet

A well made and well finished small Bath Faucet, accurately machined and tested under air pressure. Nozzle clears rim of tub by approximately 1 1/4".

LESS COUPLINGS

No. 6605-C—With Lock Nuts, less Couplings, with Brass Lever Handles. (See No. 6615-C Page 3 this section.)

Top Handle Double Bath Faucet

No. 6606-C

A sturdy, well made Bath Faucet, tested under air pressure. Made from high grade metal and beautifully designed and finished. 3 3/8" Center to Center.

LESS COUPLINGS

No. 6606-C—With Lock Nuts, less Couplings, with Brass Handles. Four Ball, Metal index. (See No. 6613 on Page 3 this section.)



No. 6606-C

3 3/8" Center to Center

Important Notice:—For special bath tub drillings, other than the standard 3 3/8", couplings can be furnished (see Page 3 this section) that will suit drillings in tub from 4" to 6 1/2" center to center.



Woodward Wanger Co.



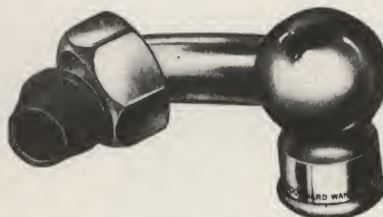
Bath Faucet Parts

—Couplings—



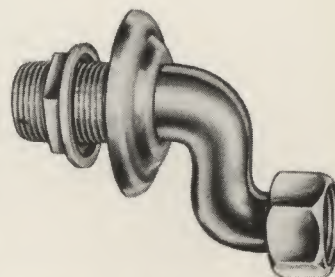
**Bent I.P. Male
Rough Nickel**

No.	Threaded	Finish
6607	$\frac{3}{8}$ " I.P.	Rough N.P.
6608	$\frac{1}{2}$ " I.P.	Rough N.P.



**Ball Offset Elbow
Ground Joint**

No.	Tapped	Finish
6609	$\frac{3}{8}$ " I.P.	Chrome
6610	$\frac{1}{2}$ " I.P.	Chrome



**Special Offset Coupling
—Chrome Plated—**

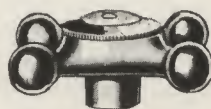
No. 6611—For Bath Tub drillings other than $3\frac{3}{8}$ ". Adjustable to fit drillings in tub from 4" to $6\frac{1}{2}$ " Center to Center.

Handles and Indexes

Chrome Plated



No. 6612-C— $2\frac{3}{4}$ " Brass Cross, Metal Button Handle. Chrome Plated.



No. 6613-C— $2\frac{3}{8}$ " Four Ball Metal Button Handle. Chrome Plated.



No. 6614-C— $2\frac{3}{8}$ " Brass Four Arm Metal Button Handle. Chrome Plated.



No. 6615-C—All Brass Lever Handle for Bath and Sink Faucets. Chrome Plated.



No. 6616-C—One Piece $\frac{5}{8}$ " Metal Button for Nos. 6612 and 6614 Handles. Chrome Plated.

No. 6616A—One Piece $\frac{3}{4}$ " Metal Button for No. 6613 Handle. Chrome Plated.



No. 6617-C—Index Ring for Holding Index Button on Nos. 6612 and 6614 Handles. Chrome Plated.

6617A—Index Ring for Holding Index Button on No. 6613 Handle. Chrome Plated.



No. 6618-C — $\frac{5}{8}$ " Threaded Metal Index Cap, Marked H or C. Chrome Plated. For Handles Nos. 6612 and 6614.

No. 6618A— $\frac{3}{4}$ " Threaded Metal Index Cap, Marked H or C. Chrome Plated. For Handle No. 6613.



Woodward Wanger Co.



Compression Faucets

— Plain —

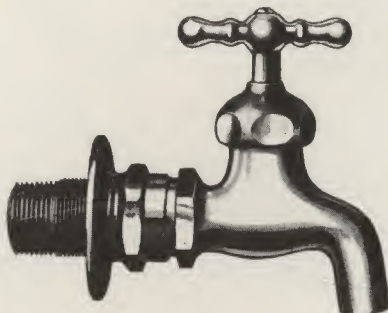
Red Metal—Rough, Polished and Plated

I.P. Threads



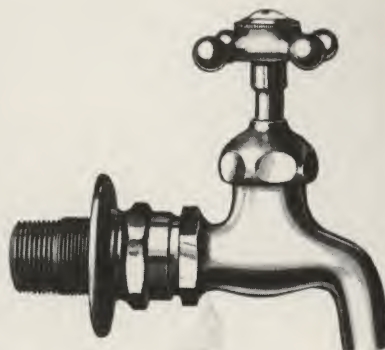
Male I.P. Thread

No.	Size	Finish
6623	1/2"	Rough
6628	1/2"	Polished
6628 R.N.	1/2"	Rough Nickel
6630	1/2"	N.P.
6630-C	1/2"	Chrome
6632	5/8"	Polished



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
6639	1/2"	N.P.
6639-C	1/2"	Chrome



Adjustable Screw Flange
Male I.P. Thread

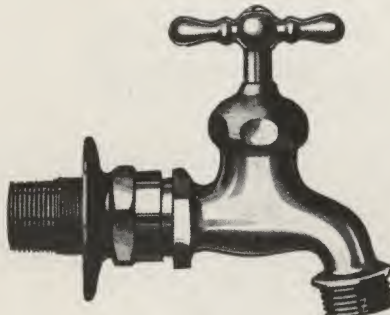
No.	Size	Finish
6640	1/2"	N.P.
6640-C	1/2"	Chrome

Compression Faucets with Hose Connection



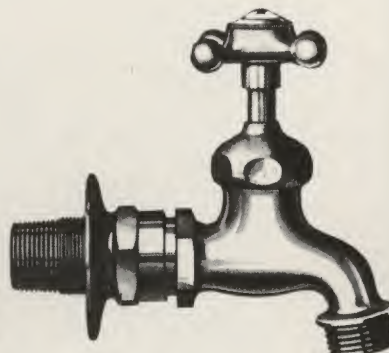
Male I.P. Thread

No.	Size	Finish
H-6624	1/2"	Rough
H-6625	5/8"	Rough
H-6629	1/2"	Polished
H-6629 R.N.	1/2"	Rough Nickel
H-6631	1/2"	N.P.
H-6631-C	1/2"	Chrome
H-6633	5/8"	Polished



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6639	1/2"	N.P.
H-6639-C	1/2"	Chrome



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6640	1/2"	N.P.
H-6640-C	1/2"	Chrome



Woodward Wanger Co.

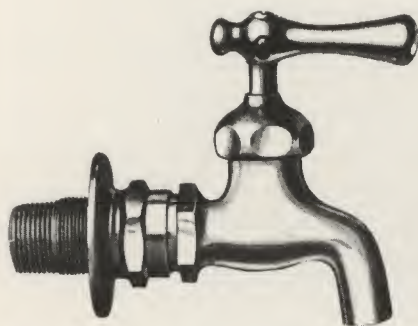


Compression Faucets

— Plain —

Brass—Nickel Plated and Chrome

I.P. Threads



Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
6641	1/2"	N.P.
6641-C	1/2"	Chrome



Female Flange
I.P. Thread

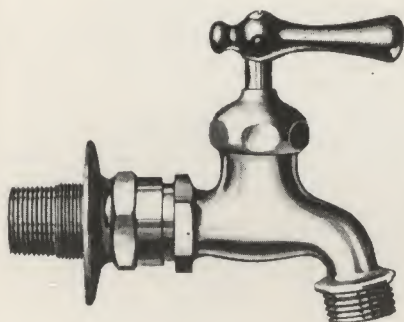
No.	Size	Finish
6642	1/2"	N.P.
6642-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
6643	1/2"	N.P.
6643-C	1/2"	Chrome

Compression Faucets with Hose Connection



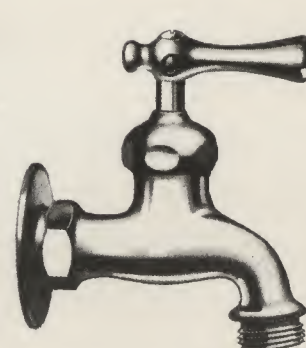
Adjustable Screw Flange
Male I.P. Thread

No.	Size	Finish
H-6641	1/2"	N.P.
H-6641-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
H-6642	1/2"	N.P.
H-6642-C	1/2"	Chrome



Female Flange
I.P. Thread

No.	Size	Finish
H-6643	1/2"	N.P.
H-6643-C	1/2"	Chrome



Woodward Wanger Co.

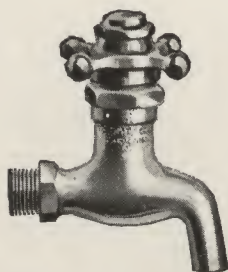


Self-Closing Faucets

Ball Bearing

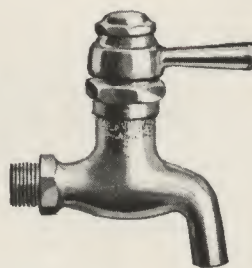
All These Faucets Have:—

- (1) Bronze Renewable Seats.
- (2) Phosphor Bronze Spring.
- (3) Bronze Ball Bearings.
- (4) Anti-Splash Rib in Spout.



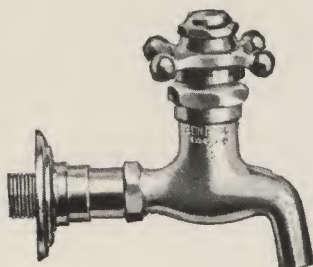
No. 6645

Four Ball Handle, with Metal Index. Samson Lock for quick handle adjustment.



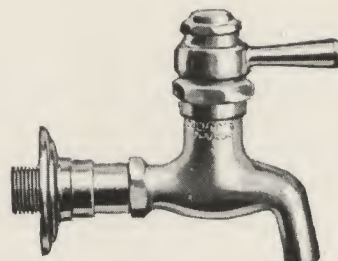
No. 6648

Brass Lever Handle, with Metal Index. Samson Lock for quick handle adjustment.



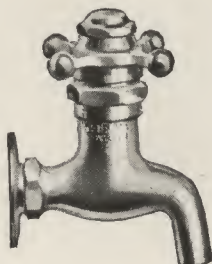
No. 6646

Four Ball Handle, with Metal Index. Adjustable Threaded Flange. Samson Lock for quick handle adjustment.



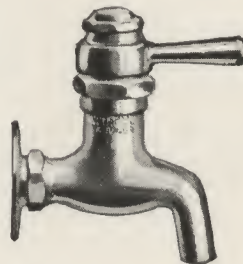
No. 6649

Brass Lever Handle, with Metal Index. Adjustable Thread Flange. Samson Lock for quick handle adjustment.



No. 6647

Four Ball Handle, with Metal Index. Female Flange. Samson Lock for quick handle adjustment.



No. 6650

Brass Lever Handle, with Metal Index. Female Flange. Samson Lock for quick handle adjustment.

The "Samson" Lock is the most positive, as well as the quickest and easiest device known to adjust the handle to the wearing of the washer, and to keep a self-closing faucet in good operating condition.



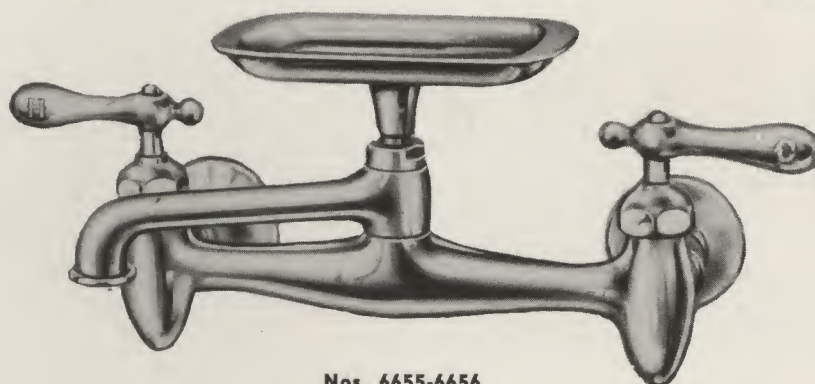
Woodward Wanger Co.



Compression Double Sink Faucet

Wanco Pattern

Brass-
Chrome Plated



Nos. 6655-6656

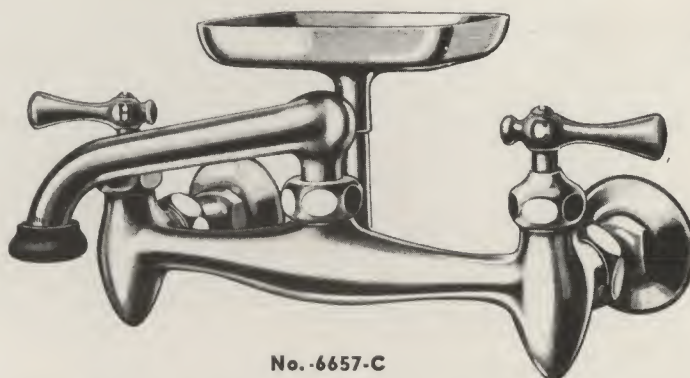
Eccentric inlet connection, adjustable $7\frac{3}{4}$ to $8\frac{1}{4}$ " center to center. Stream regulator inserted inside of nozzle. Brass removable soap dish, Chrome Plated. Beaver Tail brass lever handles, Chrome Plated. Chrome removable seats. Made of high grade red metal and beautifully designed and finished. A high quality sink faucet throughout.

M-6655-C— With $4\frac{1}{2}$ " Top Swing Nozzle, flanged male, adjustable.
F-6656-C— With $4\frac{1}{2}$ " Top Swing Nozzle, flanged female,
H-6655-C— Same as **M-6655-C** only with Hose Connection.
H-6656-C— Same as **F-6655-C** only with Hose Connection.

Either male or female can be supplied with $7\frac{1}{2}$ " or 9" Nozzle by adding $7\frac{1}{2}$ or 9 to above Number.

Compression Double Sink Faucet

Brass-
Chrome Plated



No. -6657-C

Complete with safety stream regulator. All Brass lever handles, Chrome Plated. All Brass Chromium Plated soap dish. Made of high grade red metal and beautifully designed and finished throughout, adjustable $7\frac{3}{4}$ to $8\frac{1}{4}$ " center to center.

M-6657-C With $4\frac{1}{2}$ " Top Swing Nozzle, flanged male, adjustable.
F-6657-C With $4\frac{1}{2}$ " Top Swing Nozzle, flanged female,

Either male or female can be supplied with $7\frac{1}{2}$ " or 9" Nozzle by adding $7\frac{1}{2}$ or 9 to above Number.

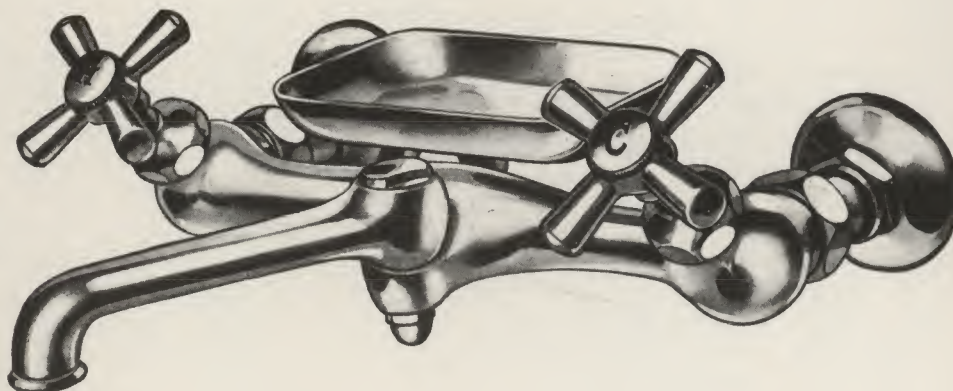


Woodward Wanger Co.



Compression
Double Sink Faucet

Brass—Chrome Plated



No. 6658-C

Brass—Chrome Plated

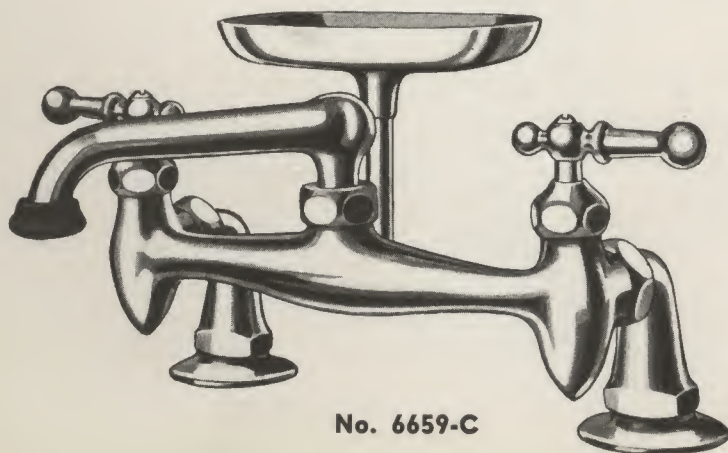
Full Easy Natural Grip because of the new handle angle. It meets the user half way. It is new, smart and stylish. Made of high quality red metal, heavy chromium plate highly polished, with Four Arm all brass, Chrome index handles as illustrated.

Eccentric Inlet Connection adjustable $7\frac{3}{4}$ " to $8\frac{1}{4}$ " Center to Center. Removable seats. Furnished with Safety Stream Regulators and $4\frac{1}{2}$ " Swing Nozzle. Removable Soap Dish.

M-6658-C — Adjustable Screw
Flange Male I.P.

F-6658-C — Flanged Female I.P.

Double Pantry Faucet



No. 6659-C

No. 6659-C

Brass—Chrome Plated

Inlet connections 8" Center to Center. Complete with Safety Stream regulator. Made of high quality red metal, beautifully designed and finished. Brass Lever handles and Soap Dish.

M-6659-C — Adjustable Screw
Flange Male I.P.

F-6659-C — Flanged Female I.P.



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Lavatory Faucets

Chrome Plated

These faucets are made from the finest grade of red metal, accurately machined and have clean sharp threads. In other words the material, and the workmanship that goes into these faucets is the best obtainable. They are beautifully designed with smooth flowing lines and the highly polished Chrome Plating leaves nothing to be desired.



All Shanks are
2 1/4" long.

No. 6663-FA Description
2 5/8" Four Arm, Chrome Index handle.



HIGH NOZZLE FAUCET

Nozzle 1 1/8" above Lavatory slab. Meets Code requirements. Removes all possibilities of back syphonage.

1/4" Male I.P. Tail Piece.
3 1/2" Center of Body to Center of Spout.



No. Description
6664-FB 2 5/8" Four Ball, Chrome Index handle.
6664-FA 2 5/8" Four Arm, Chrome Index handle.
6664-CL Chrome Lever (Brass) Index handle.

All three faucets
SUPPLIED WITH TAIL PIECES
unless otherwise specified.

All three faucets
FURNISHED IN
POLISHED CHROME ONLY

1/4" Male I.P. Tail Piece. 3 1/2" Center of Body to Center of Spout.

No. Description
6666-HC 2 3/4" Heavy Cross Arm, Chrome Index handle.
6666-FB 2 5/8" Four Ball, Chrome Index handle.
6666-FA 3" Four Arm, Chrome Index handle.

"HC" or Heavy Cross Handle, Chrome Index.



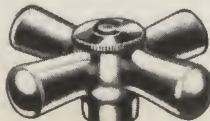
No. 6612-C

"FB" or Four Ball Handle, Chrome Index.



No. 6613-C

"FA" or Four Arm Handle, Chrome Index.



No. 6614-C

"CL" or Chrome Lever Handle,



No. 6615-C

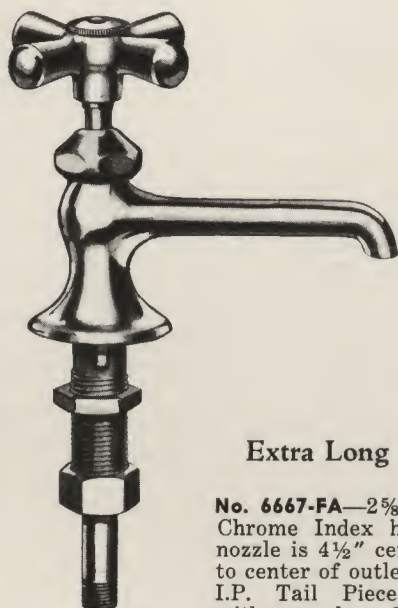


Woodward Wanger Co.



Compression
Lavatory Faucets

Chrome Plated
Only



No. 6667-FA

Extra Long Nozzle

No. 6667-FA—2½" Four Arm Chrome Index handle. The nozzle is 4½" center of body to center of outlet. ¼" Male I.P. Tail Piece. Supplied with regular 2¼" shank. Except for length of spout is the same as **No. 6664-FA**.



6668-FA

Extra Long Shank

No. 6668-FA—2½" Four Arm Chrome Index handle. The shank on this faucet is 3½" long instead of 2¼". ¼" Male I.P. Tail Piece. Except for length of shank it is the same as **No. 6664-FA**.

Compression
Side Arm Lavatory Faucet

Made for right or left hand. Brass Lever handles only.

No. 6669-C—Brass Chrome plated Lever handled, indexed. Width of flange fitting to basin is 2¼". Length of spout 3½" center of inlet to center of outlet. Height of spout above basin slab 1⅞" meeting all Code requirements. This eliminates all chance of back syphonage. Supplied with regular 2¼" shank. ¼" Male I.P. Tail Piece.



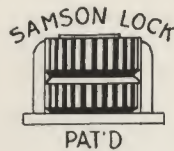
No. 6669-C

(Illustration Shows Right Hand Pattern)

Note:—Be sure to specify Right or Left hand and whether Hot or Cold.

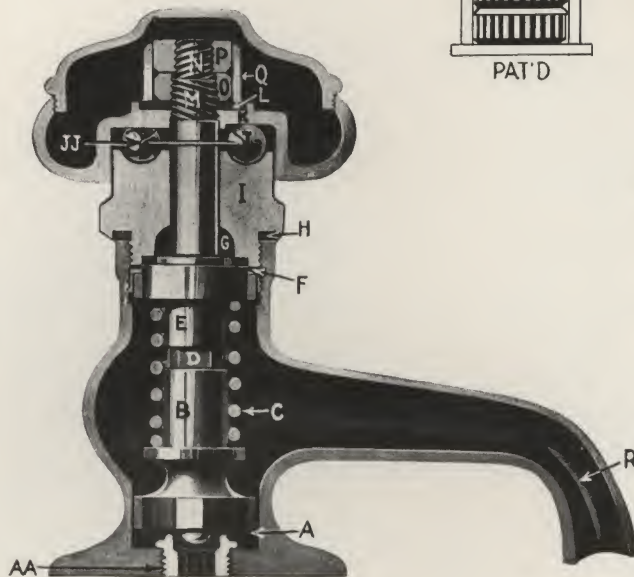


Woodward Wanger Co.



Ball Bearing Self Closing Faucets

With
Renewable Seats



AA—Bronze renewable seat.

A—Rubber seat washer encased in stem on which, at this point, four pronged extensions fitting in body insure perfect alignment of stem.

B—Stem.

C—Phosphor bronze spring.

D—Flat face on stem to accommodate gland bushing.

E—Gland bushing.

F—Prongs on gland bushing that fit into incline, making stem non-rotating and preventing grinding of seat washer on seat.

G—Packing in conical recess in incline preventing leakage through stem.

H—Hard fibre washer embedded in incline and making joint with body. White lead not required so that joint is easily broken for seat washer replacement.

I—Incline.

J—Bronze ball bearings.

JJ—Ball retainers.

R—Anti-splash rib in spout.

"SAMSON" PATENTED HANDLE LOCK

M—Section of stem with left hand thread.

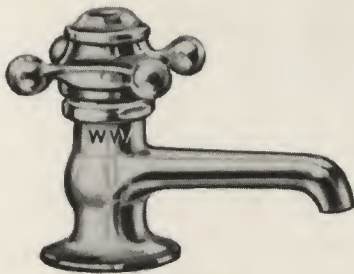
N—Section of stem with right hand thread.

O—Geared nut with left hand thread.

P—Geared nut with right hand thread.

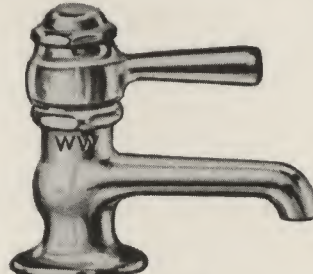
Q—Geared sleeve.

THESE SELF CLOSING FAUCETS MEET CODE REQUIREMENTS. THE HIGH SPOUTS PREVENT ANY CHANCE OF BACK SYPHONAGE.



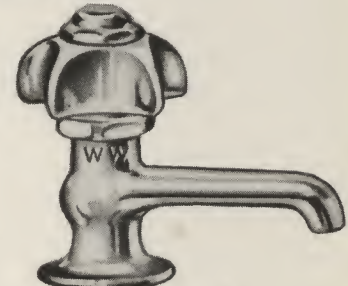
No. 6670

Four Ball Handle, metal index. $3\frac{1}{4}$ " spout. Samson Lock for quick handle adjustment. Renewable seats.



No. 6671

Brass Lever Handle, metal index. $3\frac{1}{4}$ " spout. Samson Lock for quick handle adjustment. Renewable seats.



No. 6671A

Crown Handle with metal index. $3\frac{1}{4}$ " spout. Samson Lock for quick handle adjustment. Renewable seats.



Woodward Wanger Co.

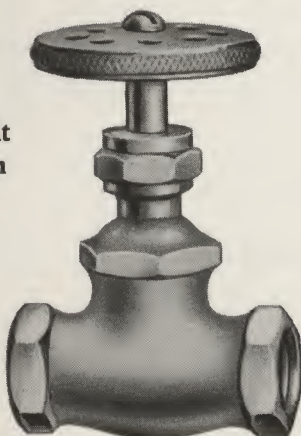


Compression Lavatory Stops

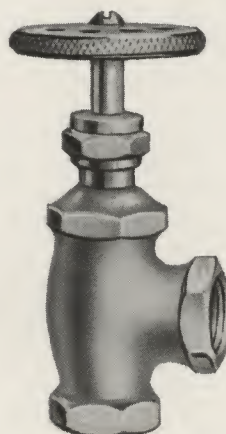
Nickel Plated
and
Chrome

•
Wheel Handles
•
Stuffing Boxes
•

Straight
Pattern



Angle
Pattern



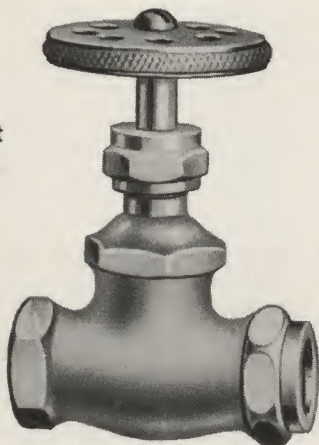
Tapped Iron Pipe Thread

No. 6672 N.P.	Size $\frac{3}{8}$ " I.P.
No. 6672-C	Size $\frac{3}{8}$ " I.P.
No. 6673 N.P.	Size $\frac{1}{2}$ " I.P.
No. 6673-C	Size $\frac{1}{2}$ " I.P.

Tapped Iron Pipe Thread

No. 6674 N.P.	Size $\frac{3}{8}$ " I.P.
No. 6674-C	Size $\frac{3}{8}$ " I.P.
No. 6675 N.P.	Size $\frac{1}{2}$ " I.P.
No. 6675-C	Size $\frac{1}{2}$ " I.P.

Straight
Pattern



Nickel Plated
and
Chrome

•
Wheel Handles
•
Stuffing Boxes
•

Angle
Pattern



Slip Joint One End

No.	Size I.P.	To Slip
6676 N.P.	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{11}{16}$ " Tube)
6676-C	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{11}{16}$ " Tube)
6676 $\frac{1}{2}$ N.P.	$\frac{1}{2}$ "	$\frac{7}{16}$ " O.D.
6676 $\frac{1}{2}$ -C	$\frac{1}{2}$ "	$\frac{7}{16}$ " O.D.
6677 N.P.	$\frac{1}{2}$ "	$\frac{9}{16}$ " O.D.
6677-C	$\frac{1}{2}$ "	$\frac{9}{16}$ " O.D.
6677 $\frac{1}{2}$ N.P.	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6677 $\frac{1}{2}$ -C	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6678 N.P.	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.
6678-C	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.

Slip Joint One End

No.	Size I.P.	To Slip
6679 N.P.	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{11}{16}$ " Tube)
6679-C	$\frac{3}{8}$ "	$\frac{3}{8}$ " I.P. ($\frac{11}{16}$ " Tube)
6679 $\frac{1}{2}$ N.P.	$\frac{1}{2}$ "	$\frac{7}{16}$ " O.D.
6679 $\frac{1}{2}$ -C	$\frac{1}{2}$ "	$\frac{7}{16}$ " O.D.
6680 N.P.	$\frac{1}{2}$ "	$\frac{9}{16}$ " O.D.
6680-C	$\frac{1}{2}$ "	$\frac{9}{16}$ " O.D.
6680 $\frac{1}{2}$ N.P.	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6680 $\frac{1}{2}$ -C	$\frac{1}{2}$ "	$\frac{1}{2}$ " I.P.
6681 N.P.	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.
6681-C	$\frac{1}{2}$ "	$\frac{3}{8}$ " I.P.

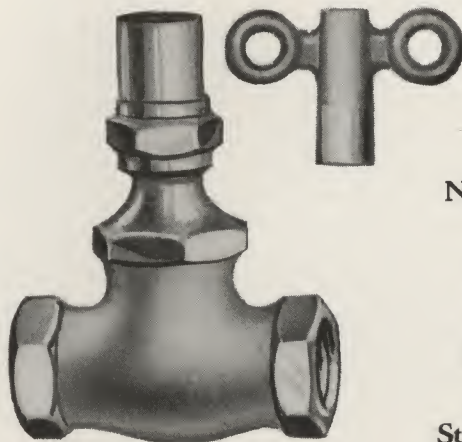


Woodward Wanger Co.



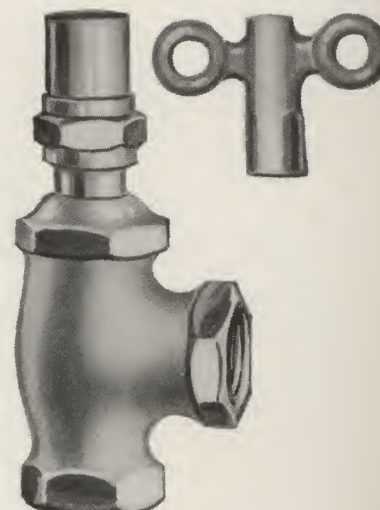
Compression Lavatory Valves

KEY TYPE



Straight Pattern
with Loose Key

No. 6682 N.P.	3/8"
No. 6682-C	3/8"
No. 6682 1/2 N.P.	1/2"
No. 6682 1/2-C	1/2"



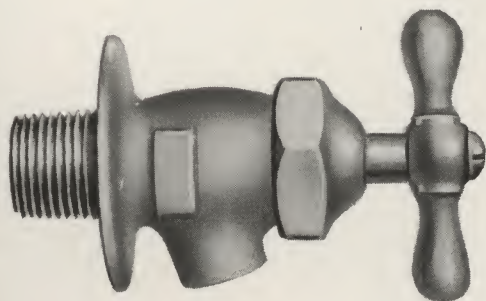
Angle Pattern
with Loose Key

No. 6683 N.P.	3/8"
No. 6683-C	3/8"
No. 6683 1/2 N.P.	1/2"
No. 6683 1/2-C	1/2"

Nickel Plated
and
Chrome
•
Loose Key
•
Stuffing Boxes
•

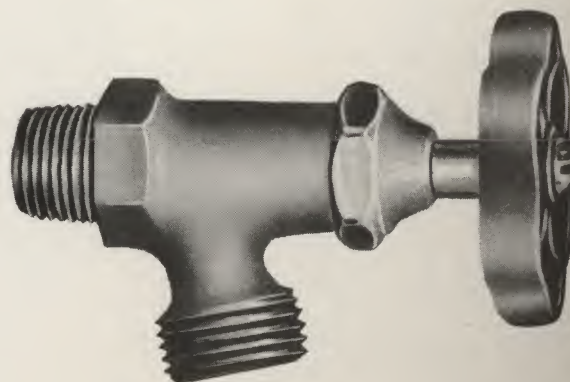
Wash Tray Faucets

WHITE PLATED



Compression—White Plated
Wash Tray Faucets

With and Without Hose Connection	
No. 6684-H	1/2"
No. 6684	1/2"
No. 6685-H	3/4"
No. 6685	3/4"



Sediment Faucet—Boiler Drain
Wheel Handle

No. 6686	1/2"
No. 6686 1/2	3/4"



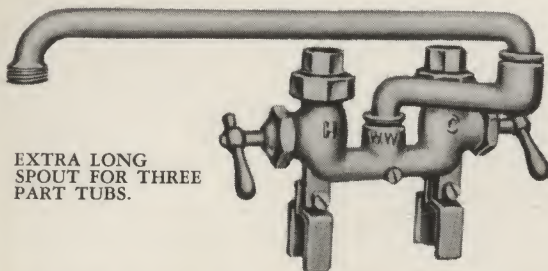
Woodward Wanger Co.



Double Laundry Tray Faucets

With Drain Outlet
Brass — Rough Nickel Finish

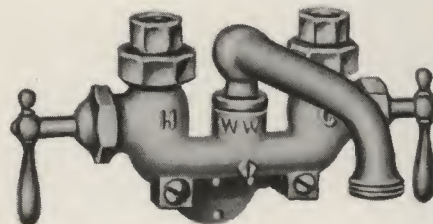
With Tray Clamps



EXTRA LONG
SPOUT FOR THREE
PART TUBS.

No. 6687—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. 3" Clearance between tray clamps. Length of double spout, when fully extended is 16" long. With Brass Lever handle.

With Wall Bracket

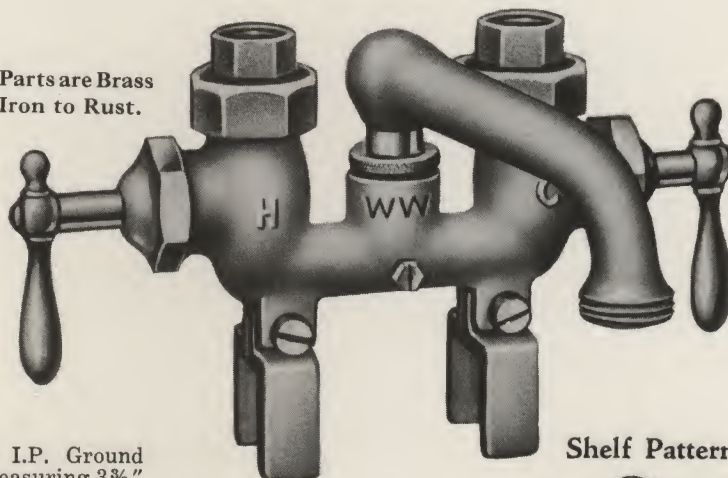


No. 6688—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Inlets are 2" Center to wall. Brass Lever handles. Length of spout $4\frac{1}{2}$ ".

No. 6688-A—Same with $7\frac{1}{2}$ " Spout.

With Tray Clamps

All Parts are Brass
no Iron to Rust.



No. 6690—Inlets $\frac{1}{2}$ " I.P. Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Tray clamps have 3" clearance between them. Length of spout $4\frac{1}{2}$ " Brass Lever handles.

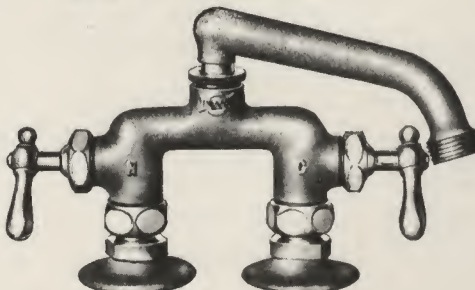
No. 6690-A—Same with $7\frac{1}{2}$ " Spout.

Soap Dish — Cast Aluminum



No. 6691—Will hold largest cake of Laundry Soap. Clamps on pipe above the Union. Furnished with drip holes.

Shelf Pattern



No. 6692—Inlets $\frac{1}{2}$ " I.P., Ground Joint Brass Unions, measuring $3\frac{3}{8}$ " Center to Center. Brass Lever handle. With 6" Spout. The Spout is $3\frac{1}{4}$ " above the top of tray.

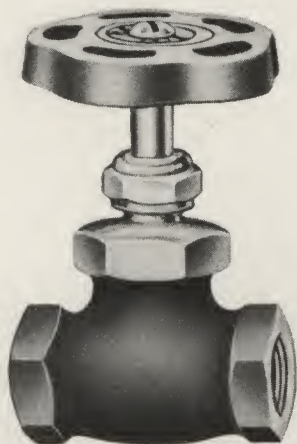


Woodward Wanger Co.



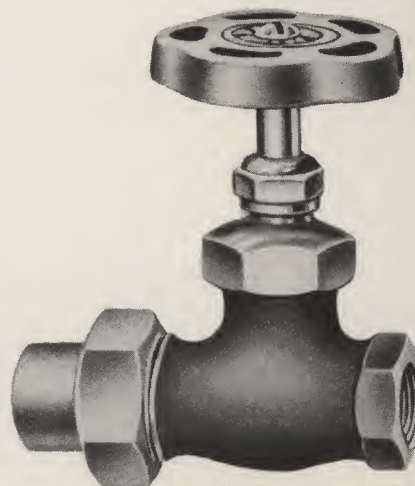
Compression Stops

Red Brass-
Rustproof Iron Wheel
Handles



With Stuffing box

No.	Size
6694	$\frac{3}{8}$ " I.P.
6694A	$\frac{1}{2}$ " I.P.
6694B	$\frac{3}{4}$ " I.P.
6694D	1" I.P.



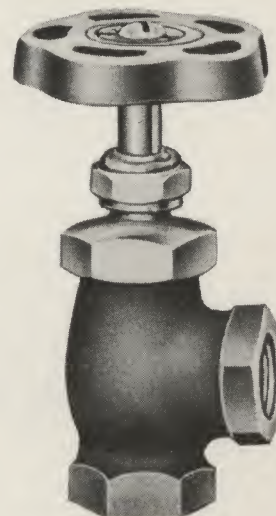
With Union and Stuffing Box

No.	Size
6695	$\frac{1}{2}$ " I.P.
6695A	$\frac{3}{4}$ " I.P.

Angle Pattern

Large Waterway — With Stuffing box

No.	Size
6696	$\frac{3}{8}$ " I.P.
6696A	$\frac{1}{2}$ " I.P.
6696B	$\frac{3}{4}$ " I.P.





Woodward Wanger Co.

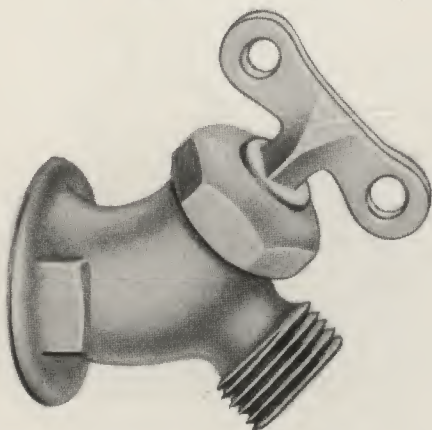


Lawn Faucets

— Brass —

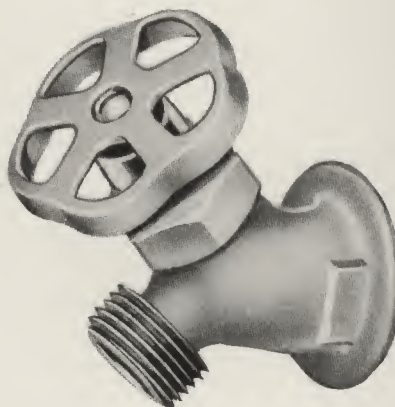
Improved Angle Pattern, permits quick and easy attachment of hose. Full size waterway, quick opening.

Loose Key Brass Handle
Rough Nickel Plate



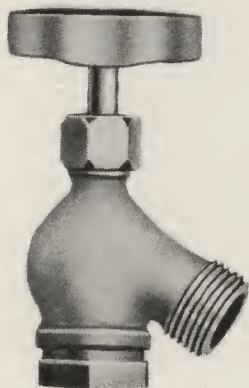
No. 6697..... $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6697A..... $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

Loose Brass Wheel Handle
Rough Nickel Plate



No. 6698 $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6699 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

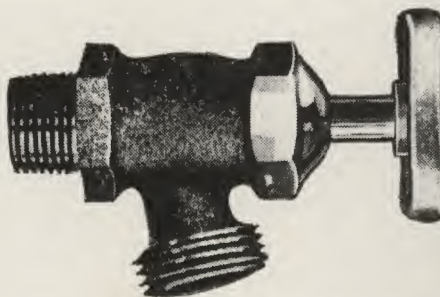
Garden Hose Faucet
Iron Wheel Handle, Sheridized



Two Piece Body Provides for
Replacement of Washer

No. 6700 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose

Lawn Faucet, Junior Pattern
Iron Wheel Handle,
Sheridized



No. 6701 $\frac{1}{2}$ " I.P. and $\frac{3}{4}$ " Hose
No. 6702 $\frac{3}{4}$ " I.P. and $\frac{3}{4}$ " Hose



Woodward Wanger Co.



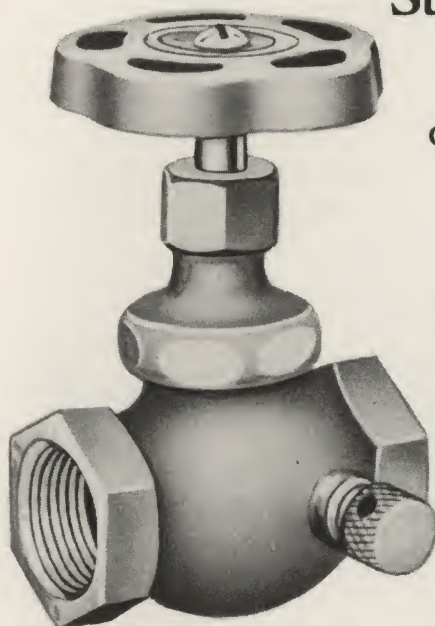
Compression

Stops and Drains

Red Brass
With
Compression Waste Cap

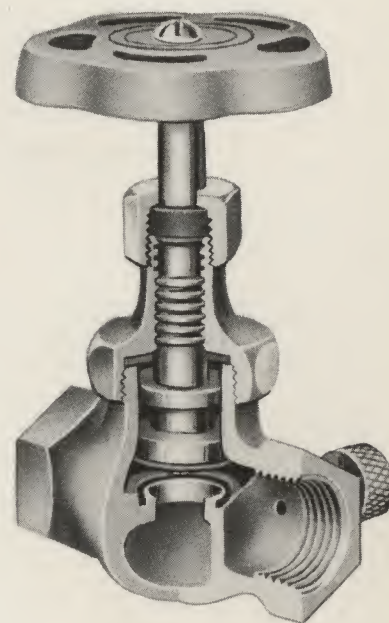
Sheridized
Iron Wheel Handle

•
Large Waterway



Straight Pattern
with Stuffing Box

No. 6705 -SB	.....	1/2"
No. 6706 -SB	.....	3/4"
No. 6707 -SB	.....	1"

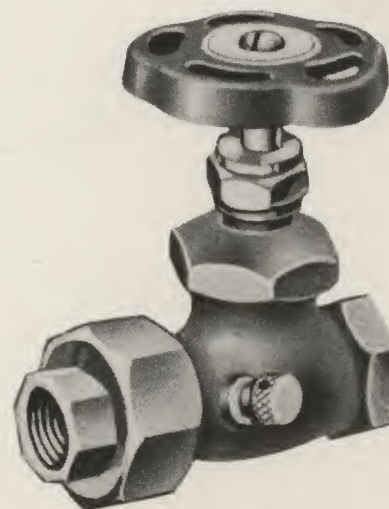


(Sectional View)



Angle Pattern
with Stuffing Box

No. 6708	.....	1/2"
No. 6709	.....	3/4"
No. 6710	.....	1"



Straight Pattern
with Stuffing Box
and Brass Ground Joint Union

No. 6711	.....	1/2"
No. 6711-A	.....	3/4"
No. 6711-B	.....	1"



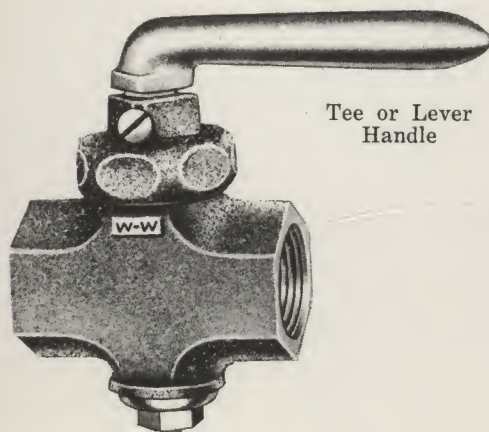
Woodward Wanger Co.



Ground Key

Stops and Stops and Drains

Straight Way Pattern

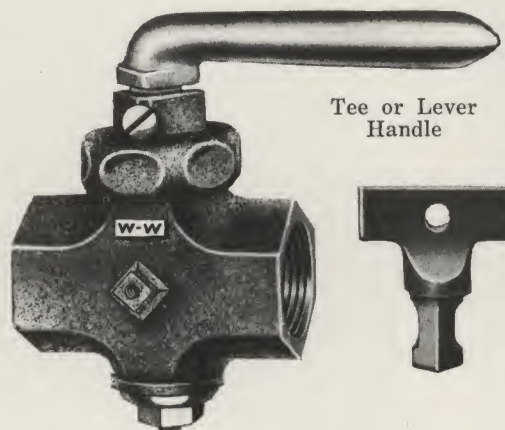


Tee or Lever
Handle

Stop for Iron Pipe

No. 6712 $\frac{1}{2}$ "
No. 6713 $\frac{3}{4}$ "

Specify Tee or Lever Handle

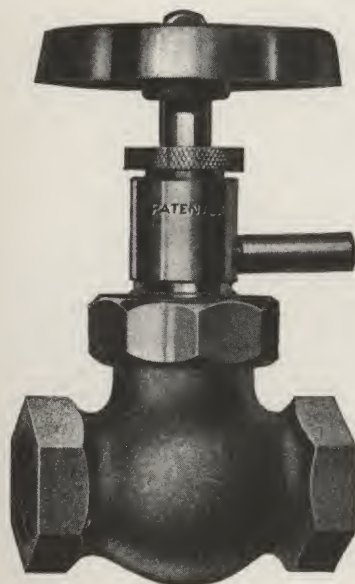


Tee or Lever
Handle

Stop and Drain for Iron Pipe

No. 6714 $\frac{1}{2}$ "
No. 6715 $\frac{3}{4}$ "

Specify Tee or Lever Handle



Automatic Stop and Drain

The Automatic Compression Stop and Drain shown herewith is recommended to the trade as an entirely satisfactory article when a Stop and Drain of the Automatic type is desired.

The construction assures the rapid CLOSING of the waste when opening the Stop and the like rapid OPENING of the waste when closing the Stop to drain water in the return piping.

WHEEL HANDLE

No.	Size
No. 6716	$\frac{1}{2}$ in.
No. 6717	$\frac{3}{4}$ in.



Woodward Wanger Co.



Nos. 6718-6721

Globe Valves

GROUND SEAT OR WASHER DISC

Made from special composition Valve Metal.

Angle Pattern

With Ground Seat No.	With Washer Disc No.	Size
6718	6718-W.....	3/8 in.
6719	6719-W.....	1/2 in.
6720	6720-W.....	3/4 in.
6721	6721-W.....	1 in.

Globe Valves

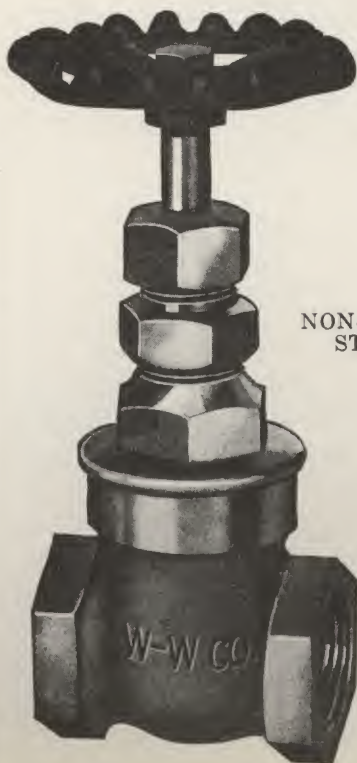
GROUND SEAT OR WASHER DISC

Straight Pattern

With Ground Seat No.	With Washer Disc No.	Size
6725	6725-W.....	3/8 in.
6726	6726-W.....	1/2 in.
6727	6727-W.....	3/4 in.
6728	6728-W.....	1 in.



Nos. 6725-6728



NON-RISING
STEM

Gate Valves

For Steam Pressure Up to 100 Lbs., and Water Pressure Up to 135 Lbs.

Gland in Stuffing Box

Can be repacked under pressure if valve is wide open.

No.	Size
6735.....	1/2 in.
6736.....	3/4 in.
6737.....	1 in.
6738.....	1 1/4 in.
6739.....	1 1/2 in.
6740.....	2 in.

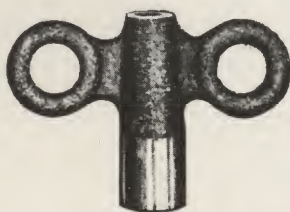


Woodward Wanger Co.



Handles

Brass Key Handle
Rough Nickel Finish



For Lavatory Stops and
Lawn Faucets

No. 6746 For Lavatory Stops .. $\frac{3}{8}$ "
No. 6747 For Lawn Faucets .. $\frac{5}{8}$ "

Brass Wheel Handle
Polished Chrome Finish



For Lavatory Valves and
Compression Stops

No. 6748-CChrome

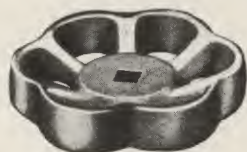
Brass Wheel Handle
Rough Nickel Finish



For Lawn Faucets

No. 6749Rough Nickel

Sheridized Iron Wheel Handle
for Rough Compression Stops
and Stops and Drains



No. 6750—Specify size for which it is to
be used.

Tee Handle for Stops and Drains
Japanned Finish



No. 6751Japanned



Nos. 6752-6753

Faucet Handle Screws—Brass

No.	Finish	Length	Threaded
6752.....	Polished	$\frac{1}{2}$ in.	9-32
6753.....	Chrome	$\frac{1}{2}$ in.	9-32



No. 6754

Set Screws—Brass
Chrome Plated, for Faucet Handles

No.	Length	Threaded
6754.....	$\frac{1}{4}$ in.	8-32

Polished Brass Tee Handle
for Compression Faucets



No. 6755Polished Brass

Rough Nickel Brass Lever
Handle for Laundry Faucets



No. 6756Rough Nickel

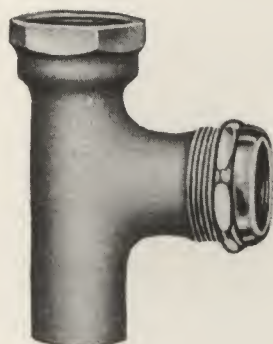


Woodward Wanger Co.



Waste and Vent Tees

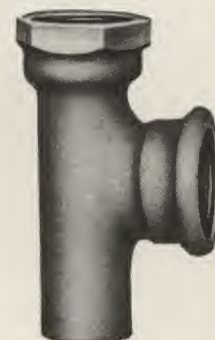
CAST BRASS



Nos. 6760-6763

Visible Ground Joint Connection on Side

No.	Waste For	Vent Tapped For	Slip Joint For
6760	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. Tube
6761	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. Tube
6762	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. Tube
6763	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. Tube



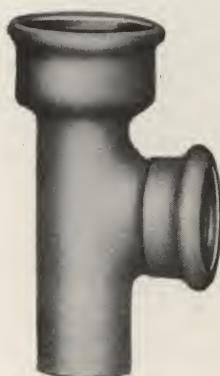
Nos. 6776-6779

Iron Pipe Thread on Side

No.	Waste For	Vent Tapped For	Side Tapped For
6776	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. I. P.
6777	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. I. P.
6778	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. I. P.
6779	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. I. P.

Iron Pipe Thread on Side

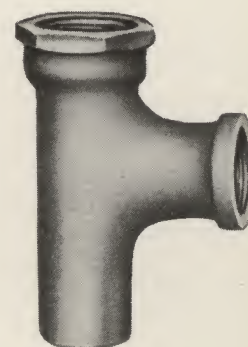
No.	Waste For	Vent To Caulk	Side Tapped For
6780	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/4 in. I. P.
6781	1 1/4 in. L. P.	1 1/4 in. I. P.	1 1/2 in. I. P.
6782	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/4 in. I. P.
6783	1 1/2 in. L. P.	1 1/2 in. I. P.	1 1/2 in. I. P.



Nos. 6780-6783

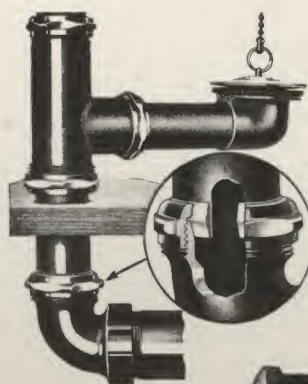
Fine Thread on Side

No.	Waste Tapped For	Vent Tapped For	Side Tapped For
6784	1 1/4 in. I. P.	1 1/4 in. I. P.	1 1/4 in. F. T.
6785	1 1/2 in. I. P.	1 1/2 in. I. P.	1 1/2 in. F. T.



Nos. 6784-6785

Waste Elbows



FOR
IRON PIPE

No. 6786-6787—Elbow connection from Bath waste to drainage line. Eliminates the cast iron screwed drainage elbow, and having a short radius with slip connection on one end permits installation in tight places. Iron pipe end has interior shoulder, making smooth unobstructed joint. Inlet end is made with a double ground joint brass cone, coupled with a I.P.S. Brass Jam nut.



FOR
LEAD
PIPE

Iron Pipe

No. 6786—1 1/2" I.P.S. Female x 1 3/8" Slip Joint
No. 6787—1 1/2" I.P.S. Female x 1 1/2" Slip Joint

Lead Pipe

No. 6788—1 1/4" Lead Pipe x 1 1/4" Slip Joint
No. 6789—1 1/2" Lead Pipe x 1 1/2" Slip Joint

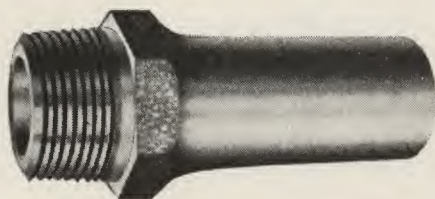


Woodward Wanger Co.



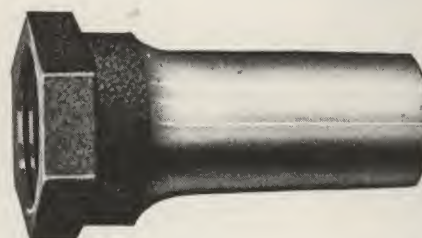
Soldering Nipples

Red Metal



MALE

6893.....	1/2 in.
6894.....	3/4 in.
6895.....	1 in.
6896.....	1 1/4 in.
6897.....	1 1/2 in.

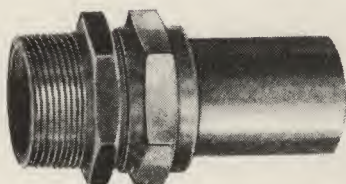


FEMALE

6901.....	1/2 in.
6902.....	3/4 in.

Ground Joint Union Coupling

— Brass —

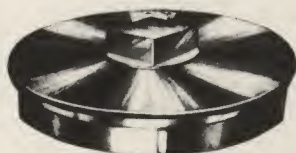


No.	For
6904	1 1/2" L.P. x 1 1/2" I.P. Male
6905	1 1/2" L.P. x 1 1/2" I.P. Female

Trap Screws

— Cast Brass —

For Lead Pipe and Drum Traps



No.	Size	Finish
6906	1"	Machined
6907	4"	Machined

For Iron Pipe Cleanout



No.	Tapped	Finish
6908	1 1/2" I.P.	Chrome
	Diameter of flange 3 1/16"	

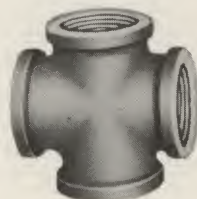
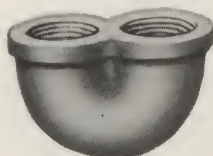
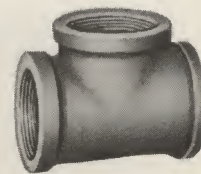
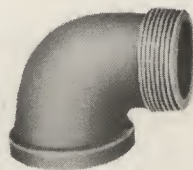
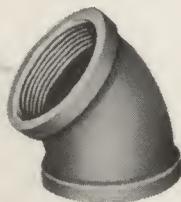
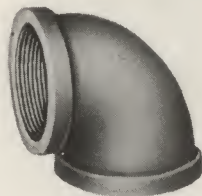
See Bath Traps on Pages 28
and 29 in our Traps and
Tubular Goods section.



Woodward Wanger Co.



Brass Fittings



Rough Brass

Tested for a Working Pressure of 125 lbs. Steam and 150 lbs. Water

	Inches	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Elbows, 90°	Each	.12	.15	.20	.28	.40	.63	.90	1.20	2.00
Elbows, Reducing, 90°	"		.19	.25	.35	.50	.80	1.10	1.50	2.50
Elbows, 45°	"	.16	.20	.25	.31	.40	.63	.90	1.20	2.00
Elbows, Street 90°	"	.25	.27	.33	.48	.63	.85	1.50	2.00	3.25
Elbows, Street 45°	"		.33	.48	.63	.85	1.50	2.00	3.25	
Elbows, Drop, Fem.	"			.35	.45	.65	1.05	1.50	2.00	3.40
Tees	"	.17	.21	.28	.40	.55	.85	1.25	1.70	2.80
Tees, Reducing	"		.25	.35	.50	.70	1.05	1.55	2.10	3.50
Tees, Drop	"			.43	.57	.80	1.25	1.85	2.50	4.20
Crosses	"	.25	.30	.40	.55	.80	1.25	1.80	2.40	4.00
Crosses, Reducing	"		.38	.50	.70	1.00	1.55	2.25	3.00	5.00
Couplings	"	.10	.13	.17	.25	.37	.55	.80	1.00	1.60
Couplings, R. & L.	"	.13	.17	.22	.30	.45	.70	1.00	1.30	2.00
Couplings, Reducing	"		.15	.20	.28	.40	.60	.90	1.10	1.75
Bushings, Regular	"		.10	.12	.15	.22	.35	.50	.70	1.00
Bushings, Faced	"		.12	.15	.19	.27	.44	.62	.87	1.25
Plugs, Regular	"	.08	.10	.12	.15	.20	.30	.45	.60	.95
Plugs, Solid	"	.08	.10	.18	.22	.30	.45	.80	1.20	1.90
Plugs, Countersunk	"			.20	.22	.30	.45	.65	.90	1.40
Caps	"	.10	.13	.16	.20	.30	.42	.60	.80	1.25
Locknuts	"	.10	.10	.12	.15	.20	.28	.40	.55	.80
Return Bends, Close	"				.70	1.00	1.25	1.80	2.50	4.25
Return Bends, Open	"				.80	1.10	1.40	2.15	3.00	4.75

Nickel Plated

Tested for a Working Pressure of 125 lbs. Steam and 150 lbs. Water

	Inches	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Elbows, 90°	Each	.36	.42	.53	.65	.87	1.25	1.75	2.25	3.35
Elbows, Reducing 90°	"		.52	.65	.82	1.10	1.60	2.15	2.85	4.15
Elbows, 45°	"	.45	.53	.65	.78	1.00	1.43	1.95	2.55	3.65
Elbows, Street 90°	"	.54	.60	.73	.95	1.23	1.65	2.55	3.35	4.90
Elbows, Street 45°	"			.73	.95	1.23	1.65	2.55	3.35	4.90
Elbows, Drop, Fem.	"		1.00	1.25	1.65	2.30	3.20	4.10	6.00	
Tees	"	.50	.58	.75	.93	1.22	1.70	2.45	3.15	4.65
Tees, Reducing	"		.72	.90	1.15	1.50	2.10	3.00	3.95	5.85
Tees, Drop	"		1.33	1.62	2.15	2.95	4.25	5.45	7.90	
Crosses	"	.72	.84	1.05	1.30	1.75	2.50	3.50	4.50	6.70
Crosses, Reducing	"		1.05	1.30	1.65	2.15	3.15	4.35	5.70	8.30
Couplings	"	.29	.33	.42	.53	.72	1.00	1.45	1.80	2.60
Couplings R. & L.	"	.37	.44	.55	.67	.92	1.30	1.85	2.35	3.35
Couplings, Reducing	"		.42	.53	.65	.87	1.20	1.75	2.15	3.10
Bushings, Regular	"		.26	.32	.42	.55	.82	1.15	1.65	2.35
Plugs, Regular	"	.28	.37	.45	.52	.67	.90	1.20	1.55	2.30
Plugs, Solid	"			.51	.59	.77	1.05	1.55	2.15	3.25
Plugs, Countersunk	"			.49	.63	.92	1.30	1.75	2.55	
Caps	"	.23	.29	.36	.47	.63	.89	1.25	1.75	2.60
Locknuts	"	.29	.30	.39	.48	.60	.77	1.00	1.30	1.85
Return Bends, Close	"				1.85	2.40	3.10	4.40	5.70	8.25
Return Bends, Open	"				1.95	2.50	3.25	4.75	6.20	8.75

For Chrome add 20% to the above Nickel Plate list.

EVERY FITTING
TESTED



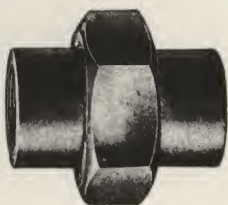
Woodward Wanger Co.



Brass Fittings

STANDARD IRON PIPE THREADS

Tested for a Working Pressure of 125 lbs. Steam and 150 lbs. Water



Brass Unions

Tested for a Working Pressure of 125 lbs. Steam and 150 lbs. Water

Inches	1/8	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
Size Each	.40	.50	.65	.85	1.15	1.60	2.25	2.70	4.00
Rough "	.45	.55	.75	.95	1.30	1.75	2.50	3.00	4.50
Semi-Finished "	.50	.60	.85	1.05	1.40	1.90	2.75	3.25	5.00
Polished "	.60	.72	1.02	1.26	1.68	2.28	3.30	3.90	6.00
Pol. & N.P. "	.75	.90	1.28	1.58	2.10	2.85	4.13	4.88	7.50

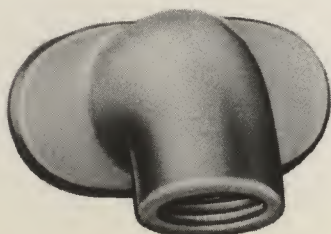
For Chrome add 20% to the above Nickel Plate list.

Brass Nipples

IRON PIPE SIZE

Size	Length Close	Close	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5	5 1/2	6
1/8	3/4	.11	.13	.15	.17	.19	.21	.23	.25	.27	.29	.31
1/4	7/8	.13	.16	.19	.22	.25	.28	.31	.34	.37	.40	.43
3/8	1	.15	.19	.23	.27	.31	.35	.39	.43	.47	.51	.55
1/2	1 1/8	.23	.25	.30	.35	.40	.45	.50	.55	.60	.65	.70
3/4	1 3/8	.28		.35	.42	.49	.56	.63	.70	.77	.84	.91
1	1 1/2	.37		.44	.53	.62	.71	.80	.89	.98	1.07	1.16
1 1/4	1 5/8	.60			.75	.88	1.01	1.14	1.27	1.40	1.53	1.66
1 1/2	1 3/4	.70			.90	1.05	1.20	1.35	1.50	1.65	1.80	1.95
2	2	1.00			1.20	1.40	1.60	1.80	2.00	2.20	2.40	2.60

Add to the above list 75% for Nickel Plate and 100% for Chrome.



Sink Elbow

Rough Brass

No. Finish Size
6911 Rough Brass 1/2" I.P.



Woodward Wanger Co.

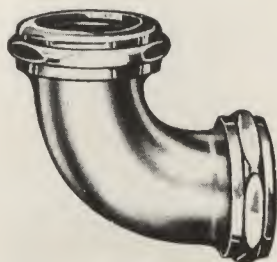


Brass Slip Joint Fittings for Tubing

Nickel or Chrome Plated

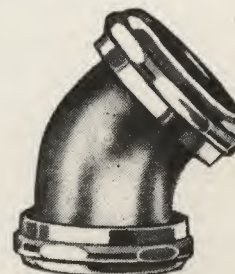
Nickel Plated Unless
Otherwise Specified

For Chrome Plated Fittings add "C"
to Catalog Number



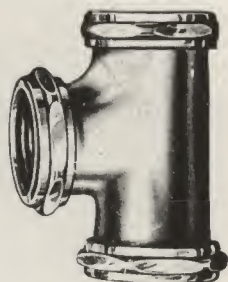
90° Elbow
DOUBLE SLIP JOINT

No.	Size
7300.....	1 1/4 in.
7302.....	1 1/2 in.



45° Elbow
DOUBLE SLIP JOINT

No.	Size
7303.....	1 1/4 in.
7305.....	1 1/2 in.



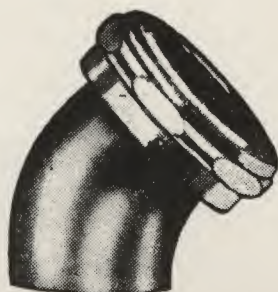
Tee
TRIPLE SLIP JOINT

No.	Size
7306.....	1 1/4 in.
7307.....	1 3/8 in.
7308.....	1 1/2 in.



90° Elbow
ONE END SLIP JOINT
ONE END FINE THREAD

No.	Size
7309.....	1 1/4 in.
7310.....	Tapped, 1 1/2 in.
7311.....	Slip Joint, 1 1/4 in.



45° Elbow
FINE THREAD AND SLIP JOINT

No.	Size
7312.....	1 1/4" F.T. x 1 1/4" Tube
7313.....	1 1/2" F.T. x 1 1/2" Tube



Tee
FINE THREAD AND SLIP JOINT

No.	Size
7314.....	Tapped 1 1/4" F.T., Slip Joint End for 1 1/4" Tube. Slip Joint Side for 1 1/4" Tube.
7315.....	Tapped 1 1/2" F.T., Slip Joint End for 1 1/2" Tube. Slip Joint Side for 1 1/2" Tube.



Woodward Wanger Co.



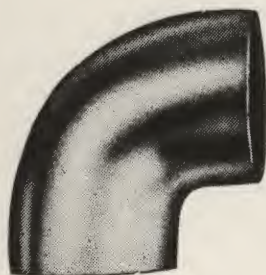
Brass Fittings for Tubing

Nickel Plated or Chrome

Supplied in Nickel Plate unless otherwise specified

If wanted in Chrome, add "C"
to the Catalog Number

For Soldering or Fine Thread



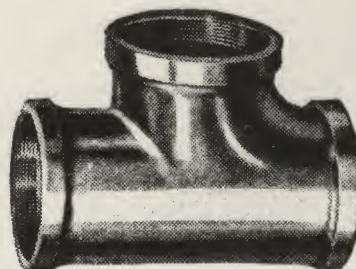
90° Elbow
TO SOLDER

No.	Size
7320.....	1¼ in.
7322.....	1½ in.



45° Elbow
TO SOLDER

No.	Size
7331.....	1¼ in.
7333.....	1½ in.



Tee
TO SOLDER

No.	Size
7337.....	1¼ in.
7339.....	1½ in.

No.	Size
7323.....	1¼ in.
7325.....	1½ in.

90° Elbow
FINE THREAD

No.	Size
7334.....	1¼ in.
7336.....	1½ in.

45° Elbow
FINE THREAD

No.	Size
7340.....	1¼ in.
7342.....	1½ in.

Tee
FINE THREAD

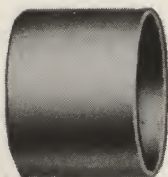
For Soldering or Fine Thread

Nickel Plated and Chrome

Supplied in Nickel Plate unless otherwise specified

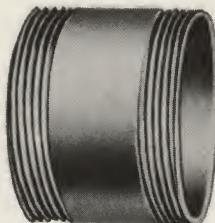
If wanted in Chrome, add "C" to the Catalog Number

Sleeve



No.	Reamed for
7343.....	1¼" O.D. Tube
7344.....	1½" O.D. Tube

Space Nipple



No.	Threaded	Length
7345.....	1¼" F.T.	1"
7346.....	1½" F.T.	1½"

Bushing



No.	Size
7347.....	1⅛" x 1"
7348.....	1¼" x 1"
7349.....	1½" x 1¼"



Woodward Wanger Co.



Brass Pipe and Tubing



Furnished Nickel Plated
unless Chrome is specified

Nos. 7400-7436

For Chrome add
"C" to Catalog Number

Annealed Tubing

Number	7400	7401	7402	7403	7404	7405
Outside Diameter	7/16"	7/16"	1/2"	1/2"	2 1/32"	1 3/16"
Gauge	19	18	19	18	14	13

Full Iron Pipe Sizes

Number	7406	7407	7408	7409	7410	7411	7412	7413	7414
Size	1/8" I.P.	1/4" I.P.	3/8" I.P.	1/2" I.P.	3/4" I.P.	1" I.P.	1 1/4" I.P.	1 1/2" I.P.	2" I.P.
Weight per ft. lbs. ....	.25	.44	.61	.91	1.24	1.74	2.56	3.04	4.02

Stock lengths: 3, 6 and 12-ft. — 6-ft. lengths shipped unless otherwise specified.

Hard Temper for Wastes, Bars, Railings, etc.

Number	7415	7416	7417	7418	7419	7420	7421	7422
Outside Diameter	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1"	1 1/8"
Gauge	20	20	20	20	20	20	17	20

Number	7423	7424	7425	7426	7427	7428	7429
Outside Diameter	1 1/4"	1 3/8"	1 1/2"	2"	1 1/4"	1 3/8"	1 1/2"
Gauge	20	20	20	20	17	17	17

Stock lengths: 3 and 6-ft. — 6-ft. lengths shipped unless otherwise specified.

Casing to Cover Wrought Iron Pipe

Number	7430	7431	7432	7433	7434	7435	7436
Outside Diameter of Casing	3/4"	1 5/16"	1 1/8"	1 3/8"	1 3/4"	1 31/32"	2 7/16"
To Cover Iron Pipe	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"

Stock lengths: 3 and 6-ft. — 6-ft. lengths shipped unless otherwise specified.
Cannot furnish in longer than 6-ft. lengths.

Flush Pipes for High Tanks

Nickel Plated or Chrome

If wanted in
Chrome, add "C"
to the Catalog
Number



Furnished Nickel Plated
unless Chrome is specified

Straight

No.	Size	Diameter of Collar	Length	Gauge
7437	1 1/4"	1 7/8"	5 1/2'	24
7437A	1 1/4"	1 7/8"	6'	20

Offset

No.	Size	Offset "C"	Diameter of Collar	Length	Gauge
7438A	1 1/4"	3"	1 5/8"	5 1/2'	24
7438B	1 1/4"	3"	1 7/8"	5 1/2'	24
7438D	1 1/4"	3"	1 5/8"	6'	20
7438E	1 1/4"	3"	1 7/8"	6'	20
7438F	1 1/4"	3 1/2"	1 7/8"	5 1/2'	24
7438G	1 1/4"	3 1/2"	1 7/8"	6'	20

Flush Pipes regularly furnished with Stamped Collars with diameters as listed above. The 1 7/8" diameter Stamped Collar will readily trim to any desired diameter. Cast or Special Collars will be furnished, if so ordered. On 20-Gauge Flush Pipes, the Cast Collars both Threaded and Soldered to Tube.



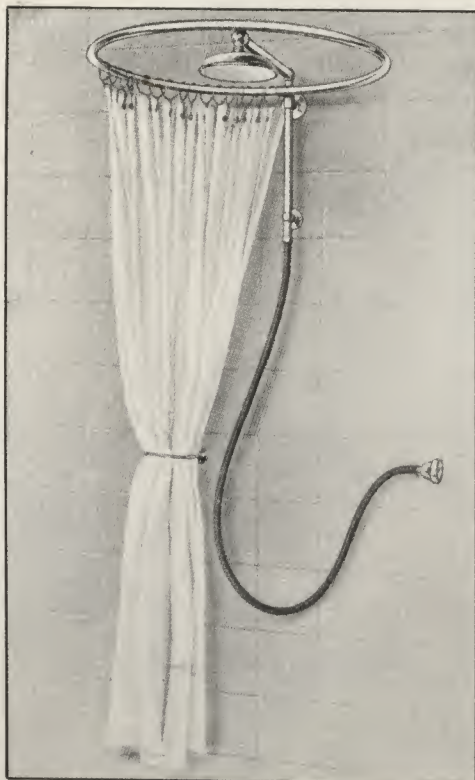
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for
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Portable Showers

Nickel Plated and Chrome

A 24" diameter ring of $\frac{3}{4}$ " Seamless Brass Tubing, with Cast wall flange. $\frac{3}{4}$ " Brass Riser and cast wall fitting. Equipped with strong, durable rubber tubing with faucet connection. $6\frac{1}{2}$ " Brass Shower Head and offset arm. Come with ten (10) Curtain Hooks.

Description

- No. 7474 N.P. — Nickel Plated Shower, less Curtain.
- No. 7474-C Chromium Plated Shower, less Curtain.
- No. 7475 N.P. — Nickel Plated Shower and 72"x72" White Duck Curtain.
- No. 7475-C Chromium Plated Shower with White Duck Curtain 72"x72".
- No. 7476-C Chromium Plated Shower and 72"x72" Mildewproof Shower Curtain. (For curtain colors see Page 5, Bathroom Fixture Section.)

Rectangular Portable Shower

Nickel Plated and Chrome

Seamless Brass $\frac{3}{4}$ " Tubing, size 24"x30" Rectangular Ring, with ceiling support. Has $\frac{3}{4}$ " Riser and cast wall flange. Strong, durable rubber tubing with faucet connection. Equipped with 4" Cast Brass Shower Head with offset arm. Comes with twenty (20) Curtain Hooks.

Description

- No. 7478 N.P. — Nickel Plated Shower less curtain.
- No. 7478-C Chromium Plated Shower less curtain.
- No. 7479 N.P. — Nickel Plated Shower with two 54"x72" White Duck Curtains.
- No. 7479-C Chromium Plated Shower with two 54"x72" White Duck Curtains.
- No. 7480 C Chromium Plated Shower with two 54"x72" Mildewproof Shower Curtains. (For Curtain colors see page 5, Bathroom Fixture Section.)





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Exposed Showers

For Factories and Institutions

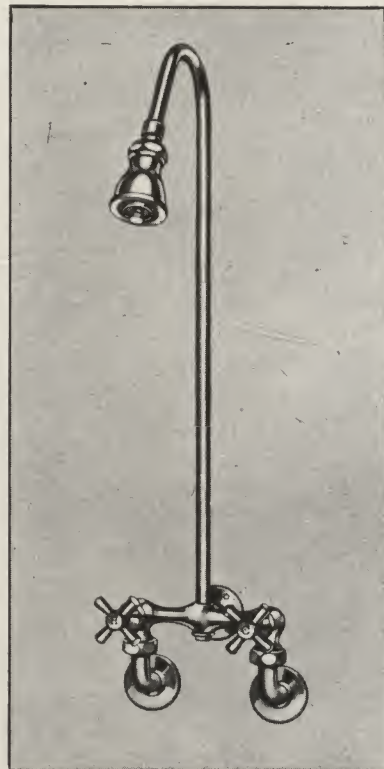


No. 7482

Rough Nickel

Industrial Shower, $\frac{1}{2}$ " double shower valve with wall bracket. Brass unions on inlets of valve ($3\frac{3}{8}$ " C. to C., 2" C. to wall.) Brass lever handles, with 8" bent shower arm and 4" Brass forged shower head.

The vertical riser and elbows are not furnished.



No. 7483

Chromium Plated

Exposed Double Shower fixture, $\frac{3}{8}$ " I. P. S. Flanged female union couplings, brass gooseneck fitted with supporting flange. Clean Spray Shower Head with ball joint. Brass 4-arm metal button handles.

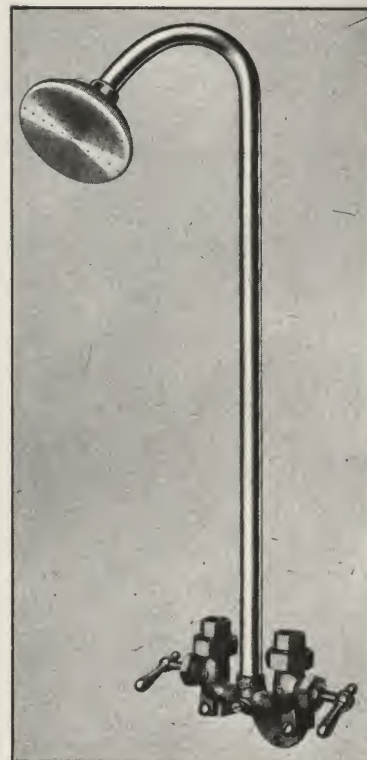
No. 7484

Same as above, but with supplies to the floor.

No. 7485

Same as above, but with supplies to the ceiling.

NOTE—Supply inlets 6" C. to C. center of valves to face of shower head 23". Face of shower head to top of gooseneck $6\frac{1}{2}$ ".



No. 7486

Industrial Shower, $\frac{1}{2}$ " double shower valve with wall bracket, with union inlets on the valve, Brass lever handles, galvanized gooseneck shower arm with 4" wrought brass shower head. $\frac{1}{2}$ " I. P.

No. 7487

Same as No. 7486 with Chrome Plated Brass Gooseneck Shower Arm.

NOTE—Supply inlets $3\frac{3}{8}$ " C. to C. 2" C. to wall, C. of wall bracket to face of shower head 38". Face of shower head to top of gooseneck $6\frac{1}{2}$ ".

INDUSTRIAL SHOWERS SHOWN ON THIS PAGE ARE EQUIPPED WITH DRAIN FOR SHOWER ARM AND VALVE BODY.

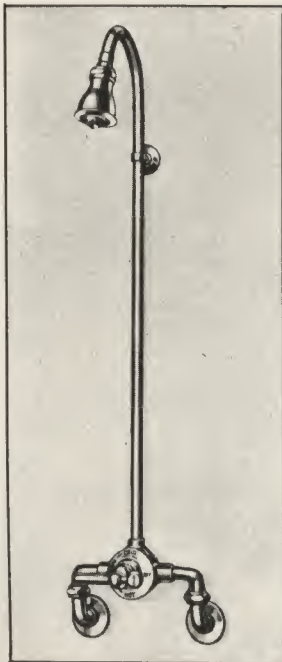


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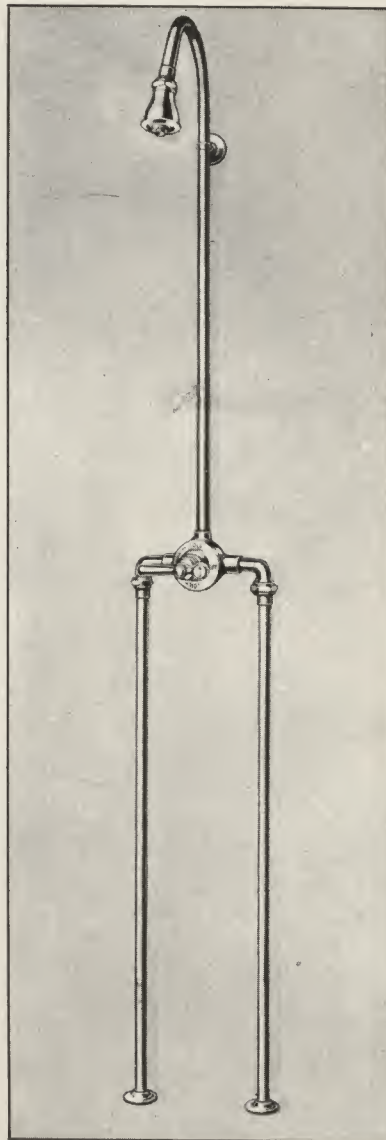
Exposed Mixing Valve Showers

Brass—Chromium Plated



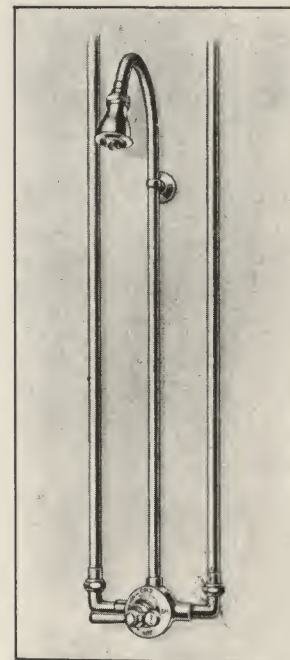
No. 7489

$\frac{1}{2}$ " Shower Mixing Valve with supplies to wall. Gooseneck Shower arm with volume control. Clean Spray shower head with ball joint. Riser 25" from end to top of bend.



No. 7490

$\frac{1}{2}$ " Shower Mixing Valve with Supplies to floor. Gooseneck shower arm with volume control. Clean Spray shower head with ball joint. Riser 25" from end to top of bend.



No. 7491

$\frac{1}{2}$ " Shower Mixing Valve with supplies to Ceiling. Gooseneck Shower Arm with volume control. Clean Spray shower head with ball joint. Riser 25" from end to top of bend.





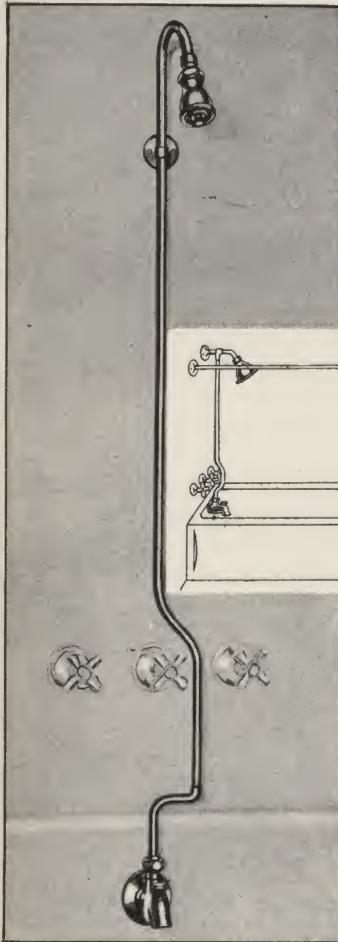
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Plus Showers

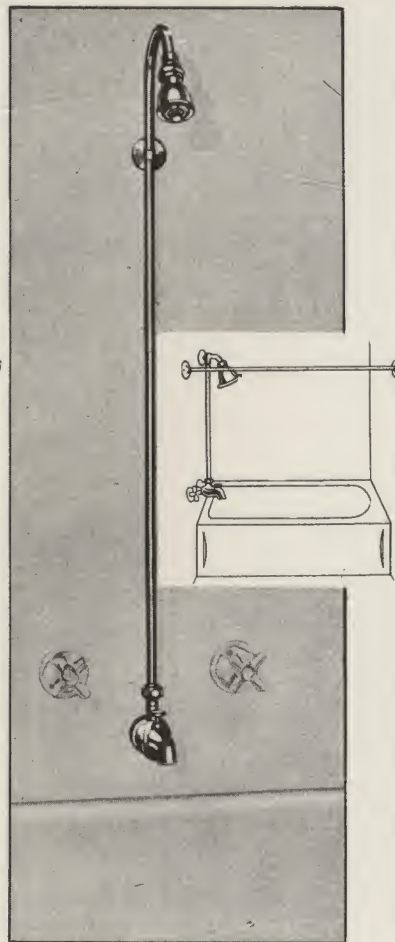
Fully automatic as water always run through spout when supply valves are first opened. When closing supply valves, the diverter valve automatically returns to spout position. To operate, pull spout knob, then diverter valve is raised and stream is diverted to shower. Stream will not flow to shower unless

diverter valve is raised. This prevents unexpected showers. Water can be tested and tempered to suit, at the spout first, then transferred to shower. Heavy 6" heavy cast brass spout with $\frac{3}{4}$ " inlet and non-splashing feature. Only one moving part, no springs or levers.



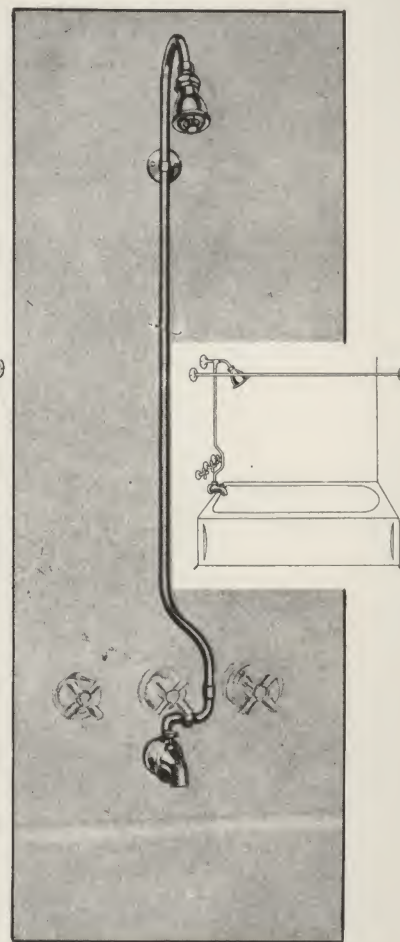
No. 7492

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter Tub Nozzle for use with Standing Drain fixture. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $55\frac{1}{2}$ ".



No. 7493

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter over the Rim Nozzle for use with Standing Drain fixture. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $46\frac{1}{2}$ ".



No. 7494

$\frac{3}{8}$ " I. P. S. Chrome Plated. With Automatic Diverter over R'm Nozzle for use with Over Rim Tub filler. Riser pipe with wall support and Clean Spray Shower Head with Ball Joint and Volume Control. From center of spout to the face of the shower head is $46\frac{1}{2}$ ".



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EXPOSED BATH SUPPLY AND SHOWER FIXTURE



No. 7496-C—Shower only Chrome Plated. Lever handle. Bath faucet as in circular insert. Riser pipe with 16" support for back or end wall. Clean Spray shower head. Frame 11/16" brass, Chrome Plated tubing, 37" x 27" with 36" support to ceiling and support to shower arm.

No. 7497-C—Same with two White Duck Curtains 5 ft. x 6 ft. (no hooks).

No. 7498-C—Same with two Mildewproof Curtains 5 ft. x 6 ft (For curtain colors see page 5, Bathroom Fixture section.)

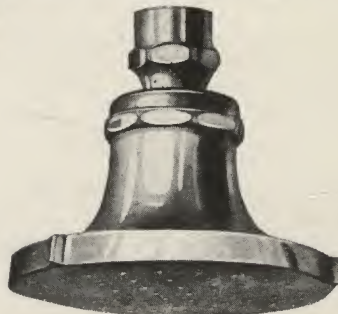
Shower Accessories

Wrought Brass Head



No. 7500—4 1/2" dia. Chrome Plated head. Removable face. I. P. S. 1/2".

Cast Brass Shower Head With Integral Ball Joint



No. 7504—4" Diameter Chrome Plated head. Removable face. I. P. S. 1/2".

Clean Spray Shower Head



No. 7507 — Chrome Plated 2 1/4" head with volume control but no ball joint. I. P. S. 1/4".

Wrought Brass Shower Head with Integral Ball Joint



No. 7501—4 1/2" dia. Chrome Plated head. Removable face. I. P. S. 1/2".

Cast Brass Shower Head Rough Brass or Chrome



No. 7502—4" dia. Rough Brass head. Removable face.

No. 7503—4" dia. Chrome Plated head. Removable face. I. P. S. 1/2".

Clean Spray Shower Head



No. 7508 — Chrome Plated 2 1/4" head, no volume control, no ball joint. I. P. S. 1/4".

Clean Spray Shower Head



No. 7506 — Chrome Plated 2 1/4" head with ball joint and volume control. I. P. S. 1/2".

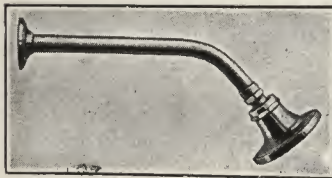


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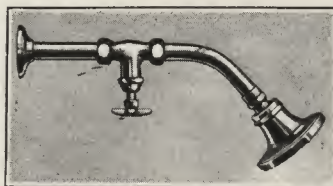
Shower Accessories

Shower Head and Arm



No. 7510—Chromium Plated Shower Arm 12" long, 4" cast brass head with integral ball joint, removable face and wrought wall flange.

No. 7510½—Same except that shower arm is 8" long.

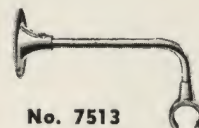


No. 7511—Chromium Plated Shower Arm 12" long and includes volume control valve or shut off. With 4" cast brass head with integral ball joint. Removable face and wrought wall flange.

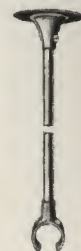
Adjustable Shower Rod Ceiling and Wall Support

No. 7512 N.P. — Ceiling Support.

No. 7512-C — Ceiling Support.

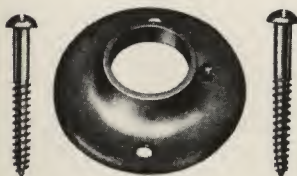


No. 7513



No. 7512

Curtain Rod Flanges



No. 7514—Chromium Plated adjustable heavy cast brass flange with set and wood screws. Slip pipe 1" O. D.



No. 7515—Chromium Plated adjustable wrought brass flange with set and wood screws. Slip pipe 1" O. D.

Curtain Rod Flanges

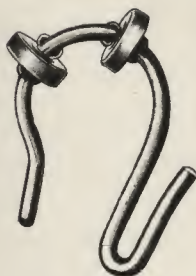


Curtain Rod Flange

Polished Chromium

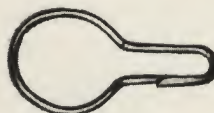
—Oblong—

No. 7516 — Chromium Plated heavy cast brass adjustable flange with set and wood screws. Used with corner curtain rod. Slip pipe 1" O. D.



Roller Bearing Curtain Ring Hooks

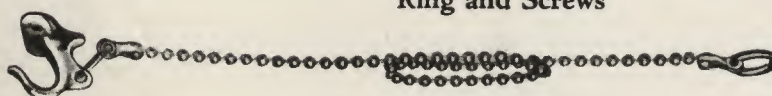
No. 7517 — For 1" bars, Chrome Plated. Make curtain slide easily.



Curtain Hooks

No. 7847-N.P.—Nickel Plated
No. 7847-C —Chromium Plated

Curtain Hold Back with Hook, Ring and Screws



No. 7519

Finish. Polished Nickel, Polished Chrome.

Short Shower Arm



No. 7518—Designed for use with stall showers, and for clubs and institutions. Has 30° flanged elbow tapped ½" I.P. with ½" Male I.P. thread.



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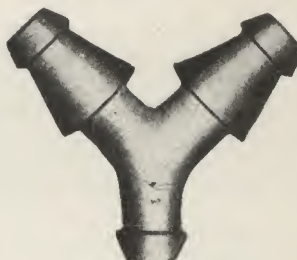
Shower Accessories

Hose Nozzle Connection
for Showers



No. 7520
Dipped Nickel

Shower Mixer



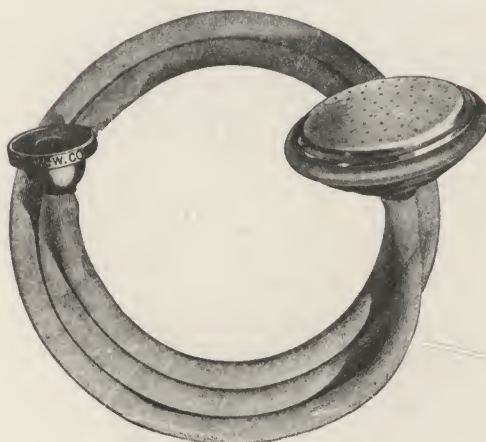
No. 7521
Nickel Plated Brass

Bath Sprinkler



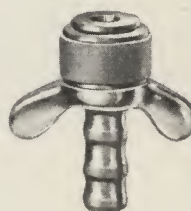
No. 7522
Nickel Plated with White
Rubber Bumper ring. $3\frac{1}{2}$ "
face.

Hand Shower



No. 7524
High quality white corrugated rubber tubing,
with Nickel Plated Bulb Connection and Brass
N. P. Spray, with rubber ring protector.

Expansion
Shampoo Coupling



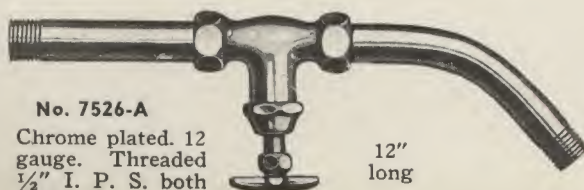
No. 7523
Chromium Plated, for Bath
faucets.

Hand Shower



No. 7525
No. 7525 N.P.Nickel Plated
No. 7525-C—Chrome Plated

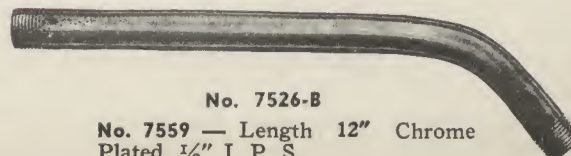
Shower Arm with Volume
Control Valve



No. 7526-A
Chrome plated. 12
gauge. Threaded
 $\frac{1}{2}$ " I. P. S. both
Ends.

12"
long

Offset Shower Arm



No. 7526-B
No. 7559 — Length 12" Chrome
Plated, $\frac{1}{2}$ " I. P. S.



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Shower Curtain Rods

Brass—Chromium Plated

STRAIGHT ROD FOR BUILT-IN TUBS



No. 7527-C
No. 7528-C
No. 7529-C

Tube 1"—20 gauge, length 38"
Tube 1"—20 gauge, length 62"
Tube 1"—20 gauge, length 68"

For 3 ft. square tub
For 5 ft. tub
For 5½ ft. tub

Furnished with two round cast, Chromium plated flanges and Chromium plated brass screws. Slip in connection.

BENT, FOR BUILT-IN TUB



No. 7532-C
No. 7533-C

Tube 1"—20 gauge, Size 28"x57"
Tube 1"—20 gauge, Size 28"x63"

For 5 ft. tub
For 5½ ft. tub

Furnished with two cast, Chrome plated oblong flanges, and Chromium plated brass screws. Slip in connection.

COMPLETE WITH CURTAIN AND HOOKS



No. 7535-C Tube 1"—20 gauge, length 62" For 5 ft. tub. Duck Curtain 66" x 72" (10 Hooks)
No. 7536-C Tube 1"—20 gauge, length 68" For 5½ ft. tub. Duck Curtain 72" x 72" (12 Hooks)

Furnished with two round cast, Chromium plated flanges and Chromium plated brass screws.

COMPLETE WITH CURTAIN, HOOKS AND HOLDBACK



No. 7538-C Tube 1"—20 gauge, Size 28"x57" For 5 ft. tub. Curtains, 36" x 72" and 66" x 72" (15 hooks)
No. 7539-C Tube 1"—20 gauge, Size 28"x63" For 5½ ft. tub. Curtains, 36" x 72" and 72" x 72" (15 hooks)

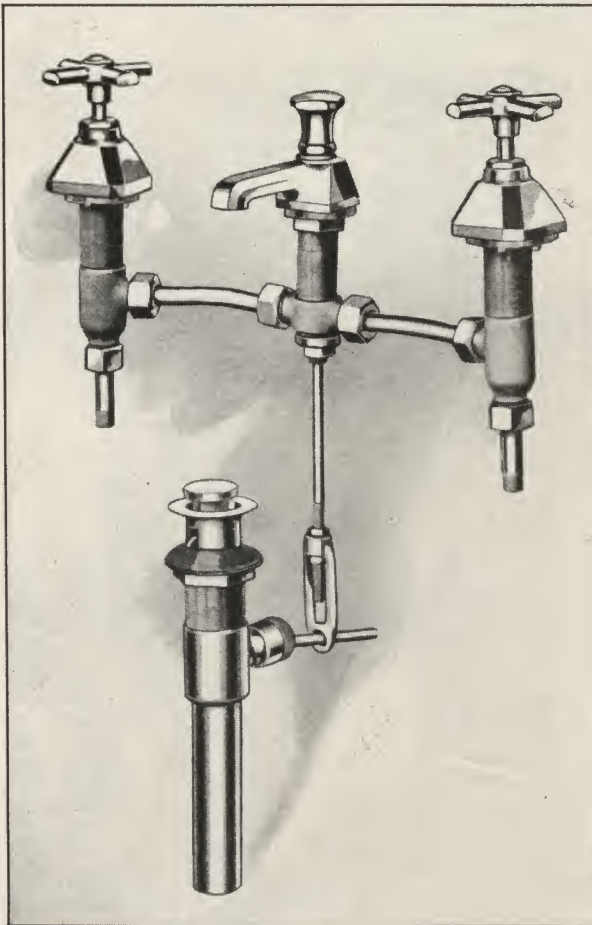
Furnished with two cast, Chrome plated oblong flanges, and Chromium plated brass screws. Slip in connection.



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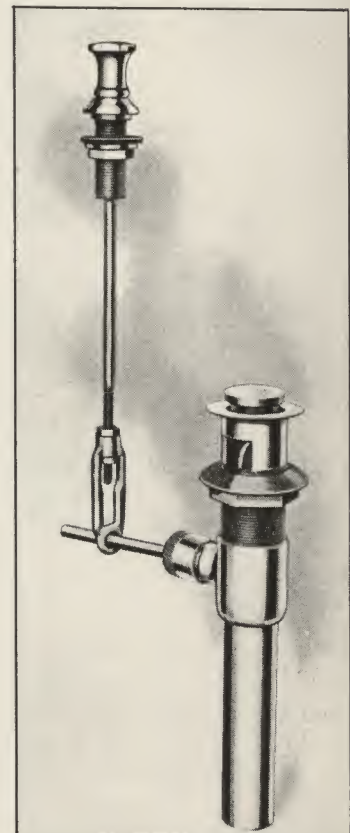
GEM LAVATORY FIXTURES



No. 7700

No. 7700 GEM Lavatory Fixture, with pop-up drain, valves with high renewable chromium plated seats and GEM 4 arm metal handles and escutcheons; $\frac{1}{4}$ " I. P. threaded tails on valves. Metal spout $3\frac{3}{4}$ " long; pop-up drain with metal knob and $1\frac{1}{4}$ " tail.

No. B 7700 Same as No 7700 except with metal spout $4\frac{3}{4}$ " long.



No. 7710

No. 7710 GEM Pop-Up Lavatory Drain, with Metal knob and escutcheons.

The Lavatory fixtures shown on this page are made up with $1\frac{1}{4}$ " Tail Pieces. If $1\frac{1}{2}$ " Tail Pieces are desired, order must specify.

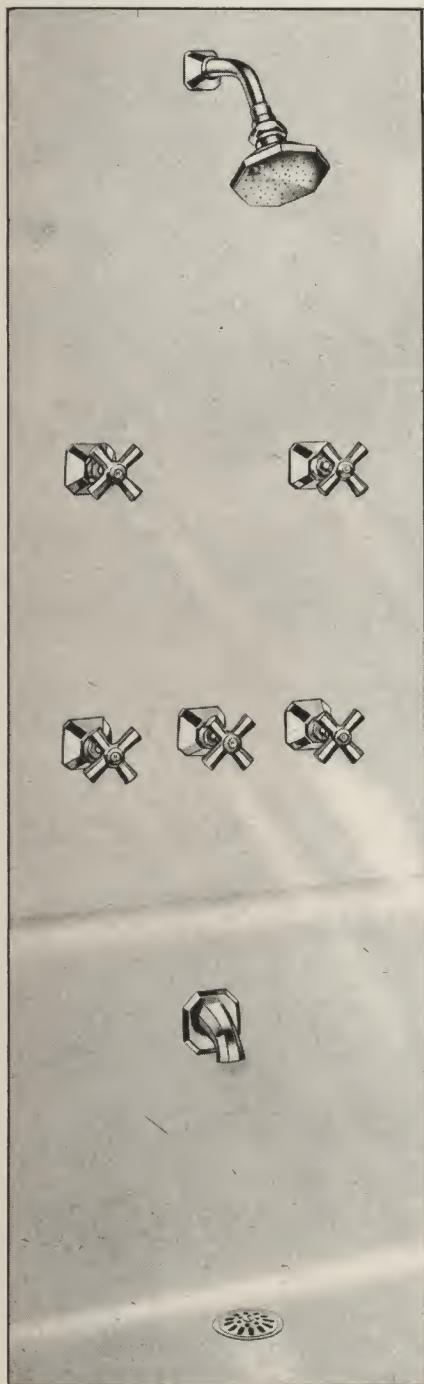
Exposed Metal Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURE



No. 7715

If Bath and Shower valves are to be connected, add the letter "C" to figure number.

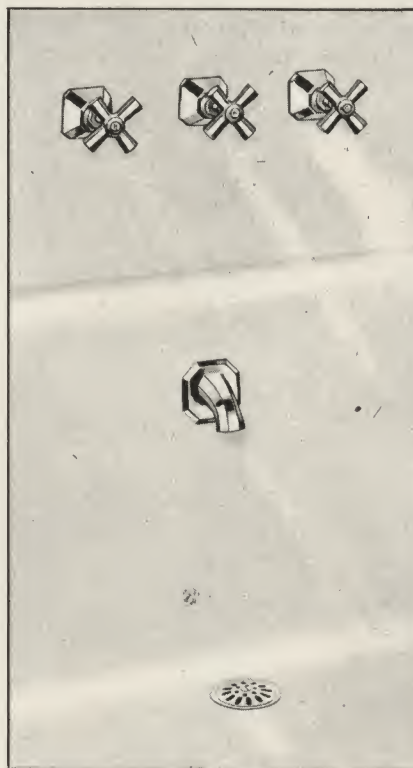
No. 7715

GEM Bath and Shower Fixture. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 11" C. to C. of bath, also shower valves; W-W brass unions on inlets of bath and shower valves. GEM 4-arm metal handles and escutcheons, with brass tub nozzle, 8" bent shower arm and wall flange, 4" brass shower head with ball joint, 2" standing drain.

No. B-7715

Same as No. 7715 but with shower valves 8" C. to C.

When fixtures are to be set in back wall near end or in center, order must specify.



No. 7720

No. 7720 GEM Bath Fixture. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of valves; GEM 4-arm metal handles and escutcheons, brass tub nozzle, 2" standing drain.

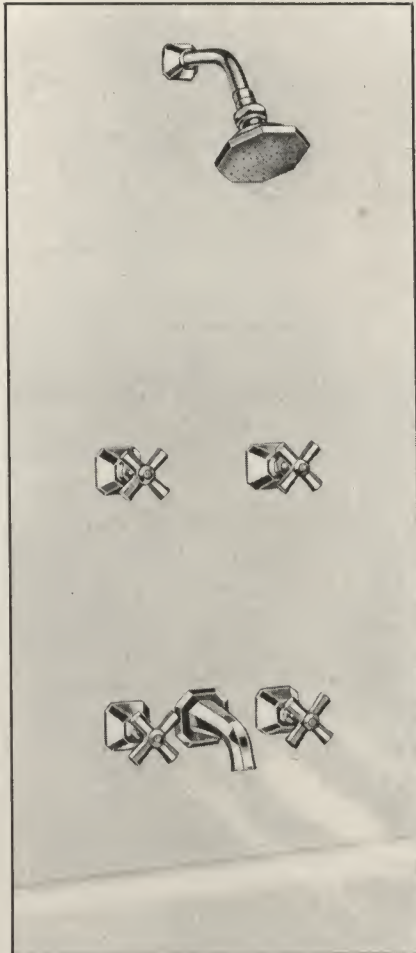
Exposed Metal Chromium Plated



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GEM BATH AND SHOWER FIXTURES



No. 7722

GEM Bath and Shower Fixture Less Waste. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of bath, also shower valves. W-W brass unions on inlets of bath and shower valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 8" bent shower arm with flange, 4" brass shower head with ball joint.



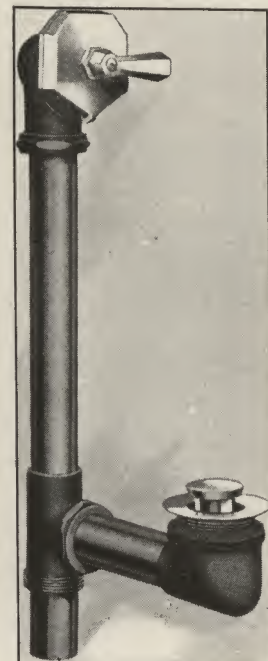
No. 7723

No. 7723 GEM Over-Rim Tub Fitter. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of valves; W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle.



No. 7506

When Specified, Fixtures can be furnished with Clean-spray Art Design Shower Heads.



No. 7724

Fixtures shown on this page can be furnished with Valves 11" C. to C., add the letter "S" after figure number.

If Bath and Shower valves are to be connected, **No. 7724 GEM Trip Lever Pop-Up Bath Waste.** Metal lever handle.

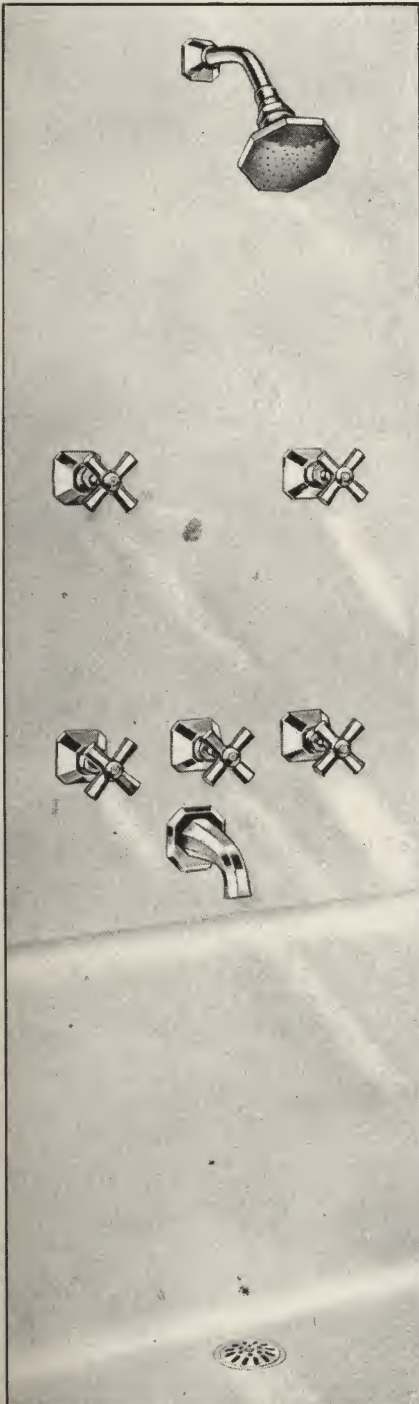
Exposed Metal Chromium Plated



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GEM BATH AND SHOWER FIXTURE



No. 7725

If Bath and Shower valves are to be connected, add the letter "C" to figure number.

No. 7725 GEM Bath and Shower Fixture. $\frac{1}{2}$ " by-pass valves, with high renewable chromium plated seats, 11" C. to C. of bath, also shower valves; W-W brass unions on inlets of bath and shower valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 8" bent shower arm, with brass flange, 4" brass shower head with ball joint, 2" standing drain.

No. B-7725 Same as **No. 7725** but with shower valves 8" C. to C.



No. 7730

GEM Bath Fixture. $\frac{1}{2}$ " by-pass valves, with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, brass over-rim nozzle, 2" standing drain.



When Specified, Fixtures can be furnished with Clean-spray Art Design Shower Heads.

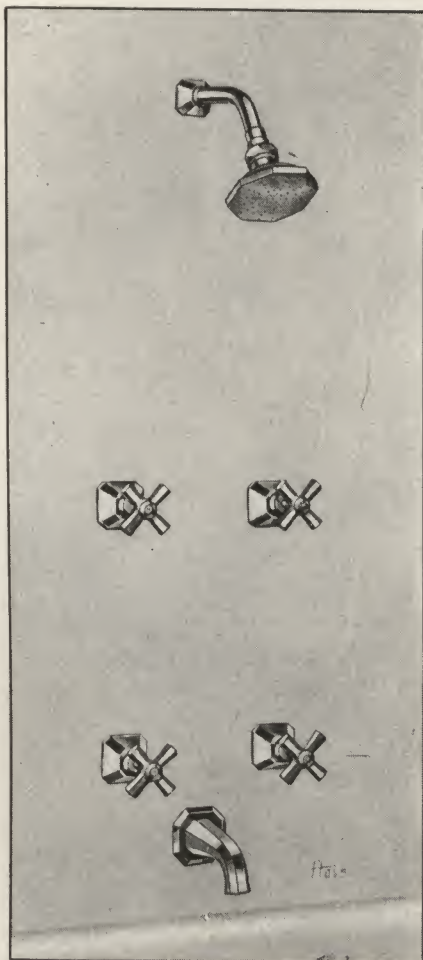
Exposed Metal Chromium Plated



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GEM BATH AND SHOWER FIXTURES

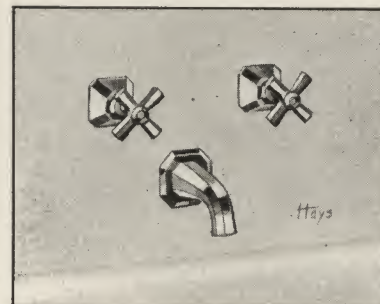


No. 7731

GEM Bath and Shower Fixture Less Waste. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of bath, also shower valves. **W-W** brass unions on inlets of bath and shower valves. **Bath and shower valves connected.** GEM 4-arm metal button handles and escutcheons, brass over rim nozzle, 4" below bath valves, 8" bent shower arm with flange, 4" brass shower head with ball joint.

No. B-7731

Same as **No. 7731** but less connecting pipe between Supply Tee and Nozzle.



No. 7732

GEM Over Rim Tub Filler. $\frac{1}{2}$ " by-pass valves with high renewable chromium plated seats, 8" C. to C. of valves; **W-W** brass unions on inlets of valves; GEM 4-Arm metal button handles and escutcheons, brass over rim nozzle, 4" below bath valves.

No. B-7732

Same as **No. 7732** but less connecting pipes between Supply Tee and Nozzle.

Fixtures shown on this page can be furnished with Valves 11" C. to C. Add the letter "S" after figure number.

If Bath and Shower Valves are to be connected, add the letter "C" to figure number.



No. 7506

When Specified, Fixtures can be furnished with **Cleanspray Art Design Shower Heads.**

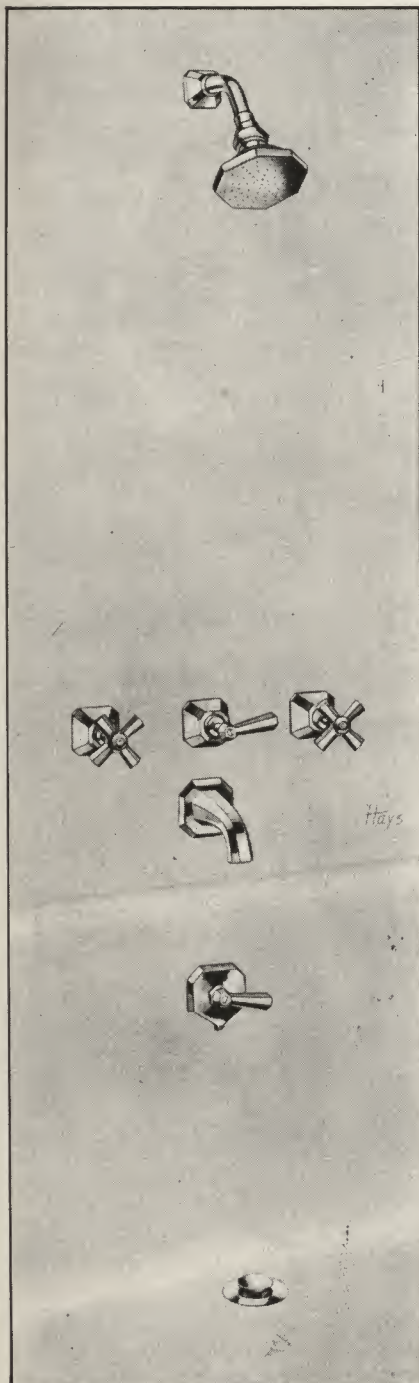
Exposed Metal Nickel or Chromium Plated



Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURES



No. 7733

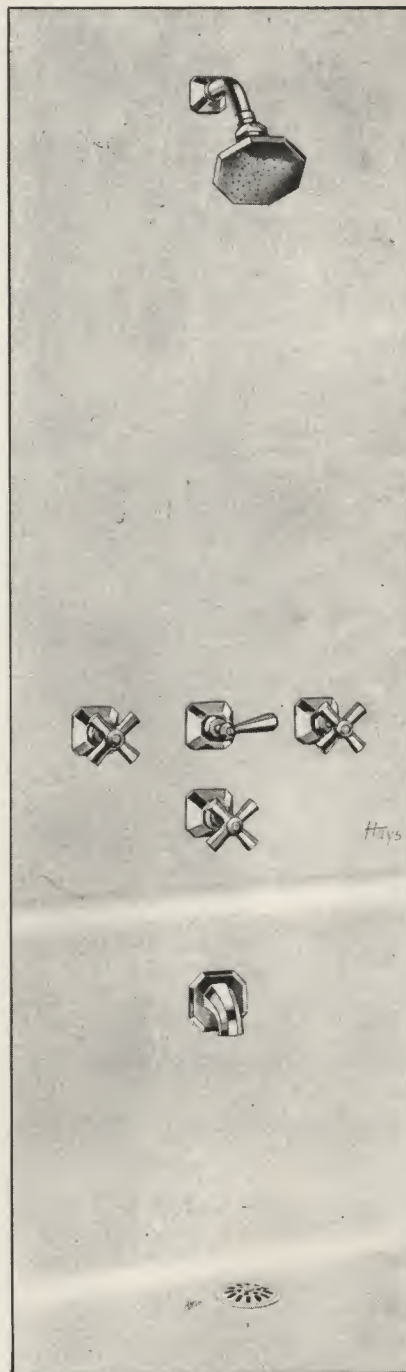
No. 7733 GEM Combination Diverting Valve Fixture, with trip lever pop-up waste (all with GEM escutcheons) Bath valves 11" C. to C. with GEM 4-arm metal button handles on control valves and GEM metal lever handle on diverting valve and trip lever waste, with brass over-rim tub nozzle, 4" shower head and arm, with brass wall flange.

No. 7734 GEM Combination Diverting Valve Fixture, with bi-transit waste, with GEM 4-arm metal button handles and escutcheons on control valves and waste. GEM metal lever handle on diverter, brass tub nozzle, 4" shower head and arm with brass wall flange.



No. 7506

When specified, clean Spray Shower Head with ball joint and volume control can be substituted.



No. 7734

When fixtures are set in back wall near end, or in center, order must specify.

Exposed Metal Chromium Plated



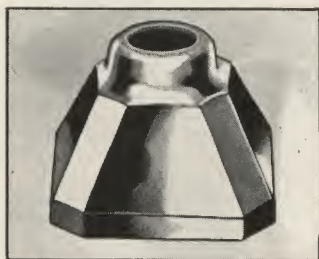
Woodward Wanger Co.



GEM BATH AND SHOWER FIXTURES



No. 7735



No. 7740
Gem Bath, Shower and
Lavatory Valve
Escutcheon

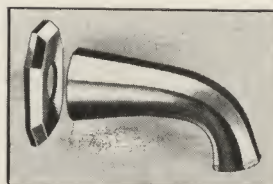
No. 7735 GEM Bath and Shower Diverting Valve Fixture Less Waste. $\frac{1}{2}$ " bath valves with high renewable chromium plated seats, 11" C. to C. of bath valves; W-W brass unions on inlets of bath valves, and with diverter for shower or tub; GEM 4-arm metal button handles, brass lever on diverter and brass escutcheons, brass over-rim nozzle, 8" bent shower arm with flange, 4" shower head with ball joint.

No. 7736 GEM Shower Fixture. $\frac{1}{2}$ " valves with high renewable chromium plated seats, 11" C. to C. of valves, W-W brass unions on inlets of valves; GEM 4-arm metal button handles and escutcheons, 8" bent shower arm with flange, 4" brass shower head with ball joint.

No. B-7736 Same as No. 7736 but with valves 8" C. to C.



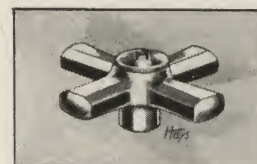
No. 7741
4" Gem Shower Head
with Integral Ball Joint



No. 7742
Gem Over-Rim Nozzle



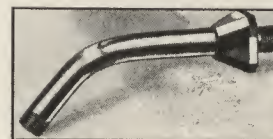
No. 7736



No. 7743
Gem Handle for Bath,
Shower and Lavatory
Valves



No. B-7742
Gem Tub Nozzle



No. 7744
8" Bent Shower Arm
with Gem Flange



Woodward Wanger Co.

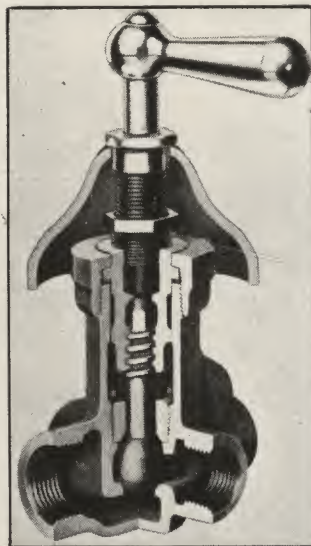


BATH AND SHOWER FIXTURES WITH DIVERTING VALVE



No. 7746

Bath and Shower Fixture, less waste. 1/2" bath valves with high renewable chromium plated seats 11" C. to C. of bath valves. W-W brass unions on inlets of bath valves, and with Diverter for Shower or Tub. Brass cross, Metal button handles, Brass lever on Diverter and Brass escutcheons, Brass over rim nozzle. 8" bent Shower arm with brass flange, Cleanspray Shower head with ball joint.



Combination Diverging Valve Fixture, with Trip Lever Pop-up Drain.

It has heavy wall lines, and is of all brass construction with ground joint valve seats on both the tub and shower outlets which afford large water way areas for both the shower and tub outlets.

A renewable thread barrel packed with a Jewett molded ring can be adjusted by loosening the outside bonnet. This will also correct slight variations in the handle.

Exposed Metal Chromium Plated



No. 7747

Combination Diverging Valve Fixture with 2" standing drain, brass cross metal button handles on control valves and waste, metal lever handle on diverter, brass tub nozzle, 8" bent shower arm with brass flange,

Cleanspray shower head with ball joint.

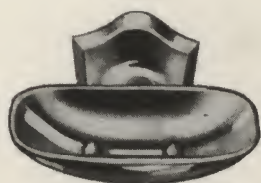


Woodward Wanger Co.



EVER-CHROME SANI-SET

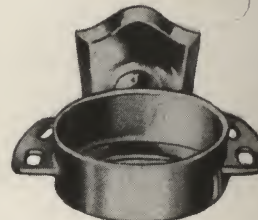
FORGED BRASS—CHROME PLATED



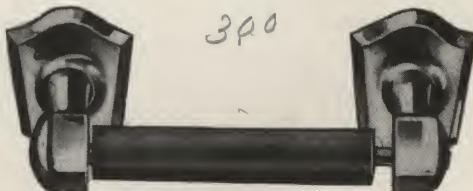
Soap Dish
No. 7802



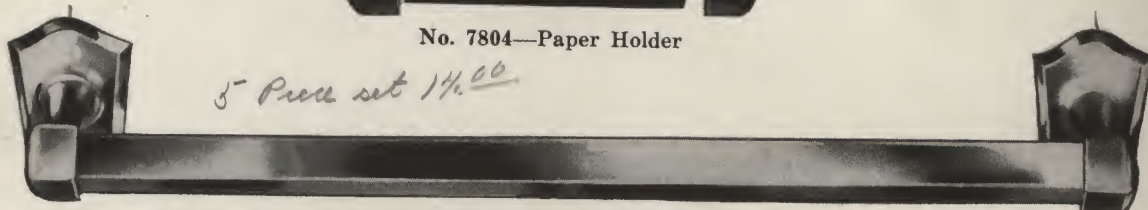
Robe Hook
No. 7801



Tumbler and Tooth Brush Holder
No. 7803

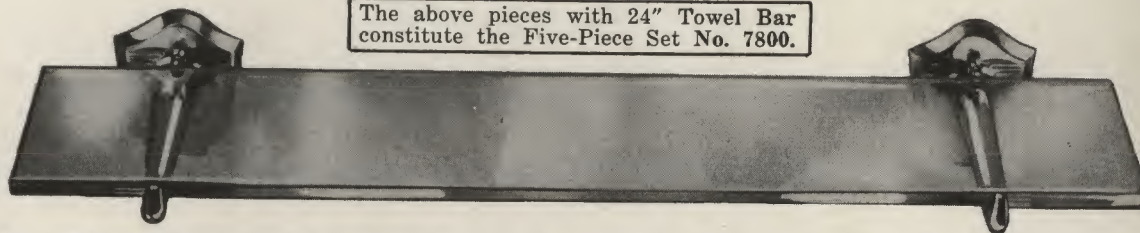


No. 7804—Paper Holder



$\frac{3}{4}$ " Square Brass Towel Bar, Chromium Plated
No. 7805-1—18" Bar $\frac{4.00}{4.30}$ No. 7805-2—24" Bar $\frac{4.60}{5.00}$
No. 7805-3—30" Bar $\frac{4.30}{5.00}$ No. 7805-4—36" Bar $\frac{5.00}{5.50}$

The above pieces with 24" Towel Bar
constitute the Five-Piece Set No. 7800.



No. 7806-1 Brackets with 18" Opal or Black Shelf

No. 7806-2 Brackets with 24" Opal or Black Shelf

No. 7806-3 Brackets with 30" Opal or Black Shelf

Directions for Installing



Fig. 1



Fig. 2

Fasten concealed mounting plate to the wall (Fig. 1). Place wall shield over stud (Fig. 2). Attach fixture



to stud with concealed set screw (Fig. 3), which draws all three pieces together in a neat tightening-fitting assembly that will not work loose. They are easily and quickly installed in any type of wall construction.



No. 7807—Grab Rail
 $\frac{3}{4}$ " x 9"



Woodward Wanger Co.



EVER-WHITE SANI-SET

3.00

Smooth, sparkling white "China" Bathroom Fixtures. An exclusive design and very good looking. Strong, sturdy and durable. A damp cloth keeps fixtures bright and clean.



Soap Dish No. 7816-W



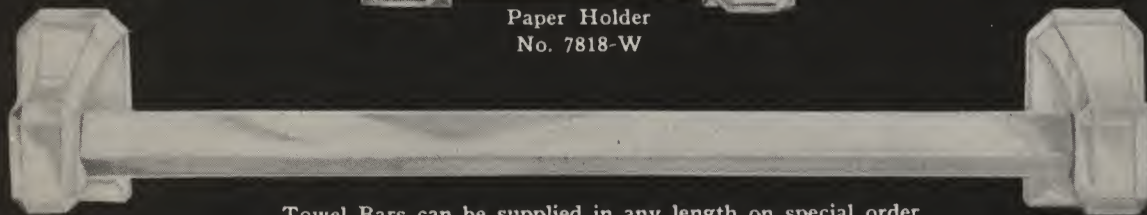
Robe Hook
No. 7815-W



Tooth Brush and Tumbler
Holder No. 7817-W



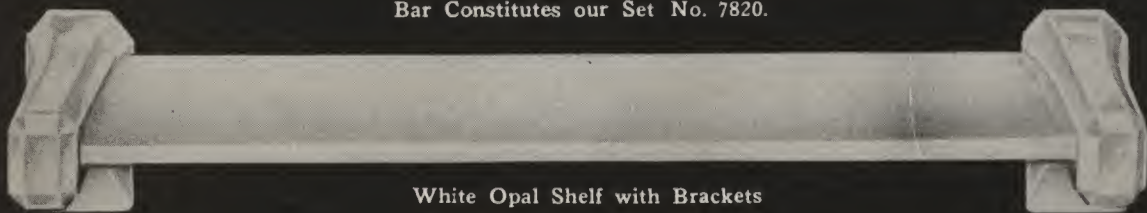
Paper Holder
No. 7818-W



Towel Bars can be supplied in any length on special order.

No. 7819-1—18" Bar No. 7819-2—24" Bar
No. 7819-3—30" Bar No. 7819-4—36" Bar

The above 5 pieces with 24" Towel
Bar Constitutes our Set No. 7820.



White Opal Shelf with Brackets
No. 7822—18" No. 7823—24"

EACH
PIECE



Slides over wedge first placed
in wall. Fit as snug and tight
as built-in-fixtures.

UNGLAZED SETS

No. 7814—5-piece unglazed set ex-
actly like set No. 7820 except for
finish. With wedges and screws.

COLORED SANI-SETS

We can supply complete five-piece
sets in Baby Blue, Green and Black.



Soap Dish Grab Rail
No. 7824-W



Woodward Wanger Co.



EVER-CHROME "JUNIOR" SET

CAST BRASS—CHROME PLATED



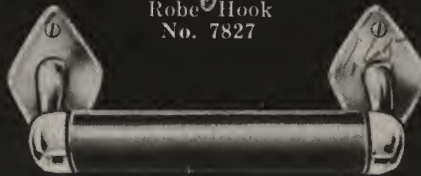
Soap Dish
No. 7829



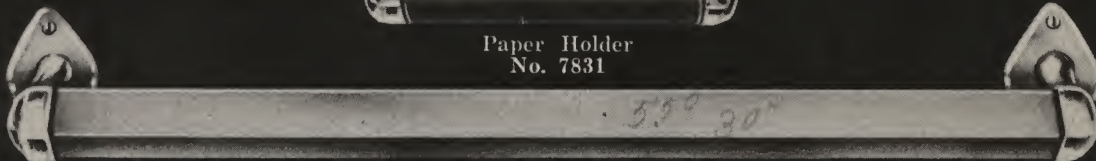
Robe Hook
No. 7827



Tooth Brush and
Tumbler Holder
No. 7830



Paper Holder
No. 7831



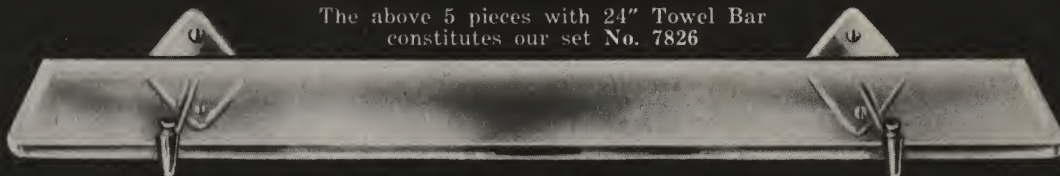
No. 7832-1 with 18" bar

No. 7832-2 with 24" bar

No. 7832-3 with 30" bar

No. 7832-4 with 36" bar

The above 5 pieces with 24" Towel Bar
constitutes our set No. 7826

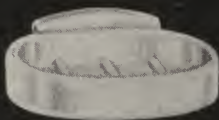


No. 7833-1 with 18" crystal shelf

No. 7833-2 with 24" crystal shelf

EVER-WHITE "JUNIOR" SET

Very similar to our regular Sani-Set, only smaller and on lighter lines.



Soap Dish
No. 7837



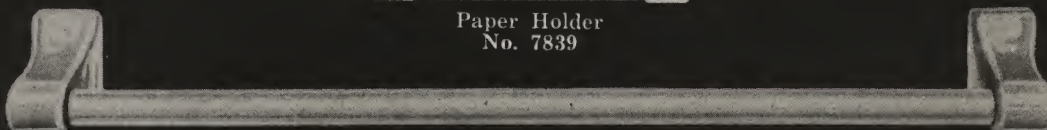
Tumbler Holder
No. 7836



Tooth Brush Holder
No. 7838



Paper Holder
No. 7839



No. 7840-1 —18" Bar

No. 7840-2 —24" Bar

The above 5 pieces with 24" Towel Bar
constitutes our set No. 7835.

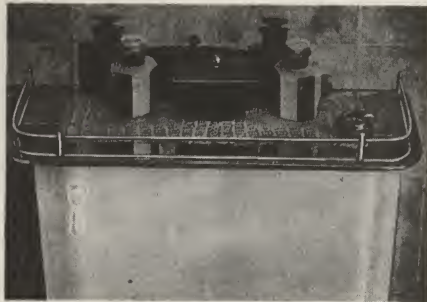
No. 7841-B —Black "Junior" Set of 5 pieces.



Woodward Wanger Co.

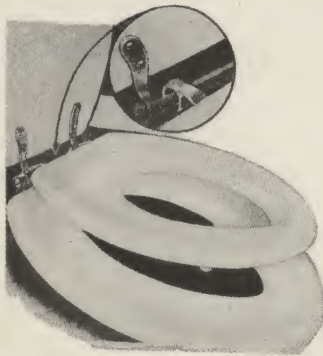


Tank Cover and Shelf



No. 7842

An extra shelf in your bathroom—a big roomy shelf that holds bottles and things too large for the medicine cabinet. This safety shelf fits right over the toilet tank. It replaces the lid of the tank, and now this space can be utilized without danger of things falling off the edge. Converts wasted space into useful space. Anybody can put it on in a jiffy, and without the need of tools. Made of brass and heavily Chromium Plated. Will stay everlastingly bright.

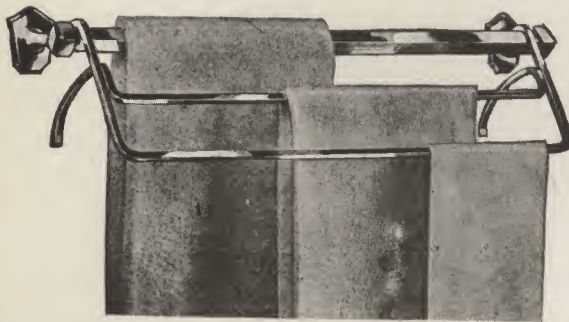


Baby Seat

No. 7843

The demand for Baby Seat caused us to design and build this one. It has no lid and is detachable as illustrated. Takes but a second to slip it on or off. The seat itself is well-made and well-finished in seamless white pyralin, buffed to a high lustre.

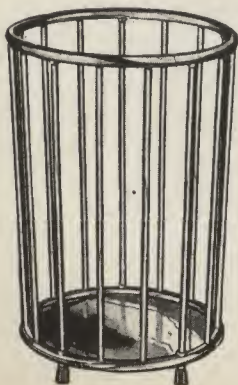
Annex Towel Bar



Made of solid brass and heavily chromium plated. Two extra towel bars can now be added to your present one. Very desirable and very useful. Complete with brackets.

No. 7844-1 -18" Bar

No. 7844-2 -24" Bar



Soiled Towel Basket

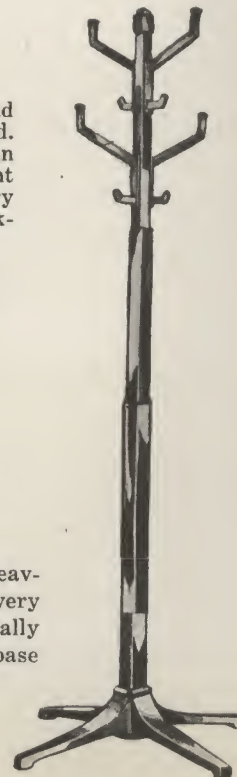
No. 7845

Substantially made with solid bottom, 11" in diameter. Height 18".

Costumer

No. 7846

Made of solid brass, heavily Chromium Plated, very strong and substantially made. Width at the base 17", height 67"





Woodward Wanger Co.



"Mildewproof" Shower Curtains

A fine quality Shower Curtain. It is Mildewproof, Shrinkproof and Fadeproof. The material is soft and pliable and can be washed and ironed and made to look new again. Will not crack or peel. Is water repellent and will not stick or cling to the body like most duck or rubberized curtains. Offered in six (6) colors.

LAVENDER
GREEN
WHITE
ROSE
BLUE
GOLD



Sizes other than those shown can be supplied.
Price on application.

No. 7848—72" x 72"
(mention color) less hooks.

No. 7849—72" x 90"
(mention color) less hooks.



Curtain Hooks

No. 7847-N.P.—Nickel Plated

No. 7847-C—Chromium Plated

White Duck Curtains

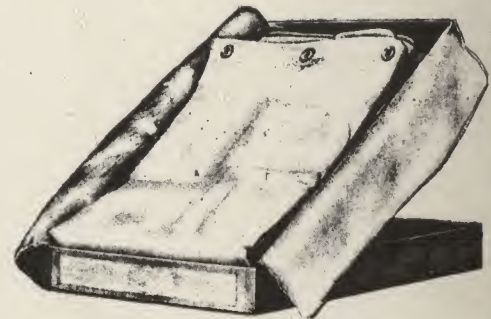
A very good quality of pre-shrunk, 8 ounces White Duck strong serviceable material.

No. 7850—White Duck 66" x 72" less hooks.

No. 7851—White Duck 72" x 72" less hooks.

No. 7852—White Duck 78" x 72" less hooks.

We can supply 8 or even 10 ounce Duck Curtains in any size desired. Cost increases with the size and weight. Special Sanforized (non-Shrinkable) White Duck can be supplied on order.



Folding Bath Bench



No. 7853. Needed to completely outfit the Modern Bathroom. Sturdy brass legs, well-braced, are truss-like in rigidity and strength. The locking feature when legs are sprung into place give positive safety. It is light, small and folded takes up little space. Especially useful where there are children. Corners rounded and feet rubber covered. White only.

Bath Stools

All with
White Feet

No. 7854
Ming Green

No. 7855
Black

No. 7856
White



Strong, sturdy wood construction. The legs and top are of "Seamless" Pyralin. Legs white with non-skid rubber feet. Top in white or colors. Shipped knocked down. Legs screw in.



Woodward Wanger Co.



Bathroom Scales

Modern Bathrooms are equipped with scales. Here is one of strong and sturdy construction. Accurate and Dependable. Will weigh up to 300 pounds. Supplied in either white or black finish.

No. 7857 White

No. 7858 Black



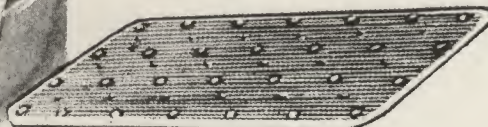
Slip-Proof Bath Tub Rugs

More serious injuries are sustained when entering or leaving the tub than in any other spot in the home. Slip-Proof bath tub rugs are cheap insurance against slipping and falling. These rugs have surface corruga-

tions and numerous vacuum cups that firmly grip the smooth finish of the tub. Two sizes, white only.

No. 7859 16" x 30"

No. 7860 14" x 26"

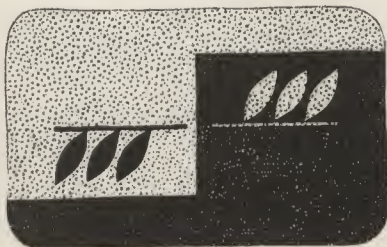


High Quality Sponge Rubber Mat

For use outside the tub or at the bottom of the tub when standing and taking a shower. Prevent skidding and are soft under foot. Durable and resilient and will improve the appearance of the bathroom. Design is in black and white.

No. 7861 15" x 24"

No. 7862 20" x 30"



Design will harmonize with any interior.



Woodward Wanger Co.



Porcelain Replacement Handles

CLOSED OR OPEN STYLE



1 1/2" Size		
No.	Marked	Style
7863	HOT	Open
7864	COLD	Open
7865	HOT	Closed
7866	COLD	Closed

1 3/4" Size		
No.	Marked	Style
7867	HOT	Closed
7868	COLD	Closed
2" Size		
No.	Marked	Style
7869	HOT	Closed
7870	COLD	Closed

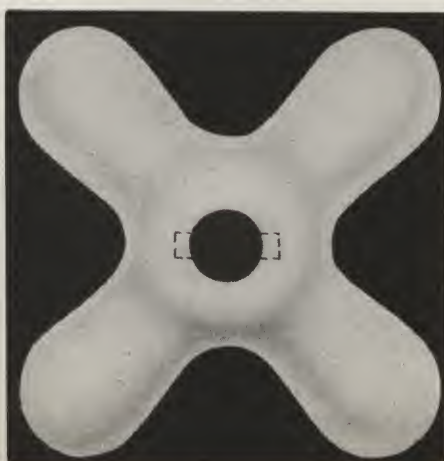


Four Prong Porcelain Handles



3 1/4" Size
No. 7873 — HOT
No. 7874 — COLD

2 3/4" Size
No. 7871 — HOT
No. 7872 — COLD



2 3/4" Size
No. 7875MarkedHOT
No. 7876MarkedCOLD

3 1/4" Size
No. 7877MarkedHOT
No. 7878MarkedCOLD

Porcelain Four-Prong Plain Handle

No. 7879. Same as "Standard" R-43. With hole through center. No markings. Size 3 1/4".



Woodward Wanger Co.



Porcelain Flanges



HEX PATTERN

For Speakman Fixture.

No. 7880. Hex Pattern. Diameter of Top Opening $\frac{1}{2}$ ". Height $1\frac{5}{8}$ ". Diameter at Base $2\frac{1}{8}$ ".

No. 7881. Same as above but with Threaded Brass Collar.



ROUND PATTERN

For Speakman Fixture.

No. 7882. Diameter of Top Opening $\frac{1}{2}$ ". Height $1\frac{5}{8}$ ". Diameter at Base $2\frac{1}{8}$ ".

No. 7883. Same with Threaded Brass Collar.

Porcelain Soap Dish

with and without Brass Spud

No. 7884. Length $5\frac{1}{4}$ ". Height $1\frac{3}{8}$ ". Width $3\frac{1}{2}$ ".

No. 7885. Same but with Brass Spud.



No. 7886

Flanges

No. 7886

Height $1\frac{3}{8}$ " Diameter.
At base $2\frac{1}{2}$ " Diameter
At top opening $\frac{1}{2}$ ".

No. 7887

Height $1\frac{3}{8}$ " Diameter.
At base $2\frac{1}{2}$ " Diameter
At top opening $12/16$ "



No. 7887-

Special Flanges can be furnished if sample is supplied as guide.

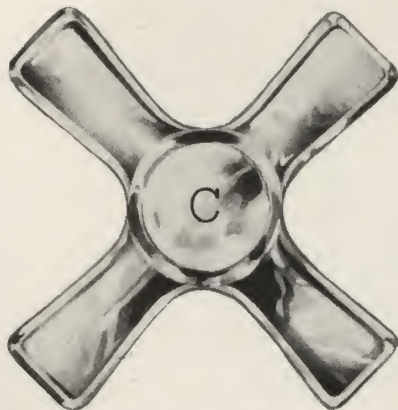


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Replacement Handles — *Multi-Grip Patent* —

These Patented Multi-Grip Handles will fit any stem, even if it is broken or chewed. Four (4) Cadmium Plated screws hold the handle firmly in place. They cannot slip. Once on, they stay on.



No. 7890—3 in.

For Built-in-Tub Fixtures. A White Metal handle, Chrome Plated. Marked H, C, W or just plain.

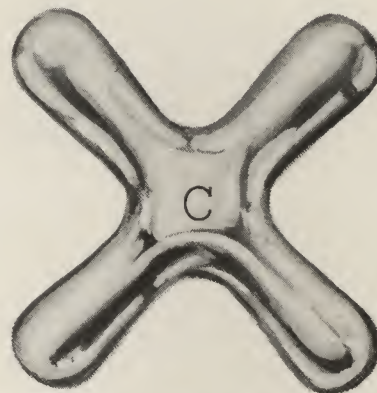
No. 7891—2½ in.

Same as above. For Lavatory or Basin Faucets. Marked H and C.



Patented
Multi-Grip
Four-Screw
Principle

Fits all sizes and types of stems. Simply screw the four adjustable cadmium plated, case-hardened screw points firmly into the stem and the handle is permanently installed. This Multi-Grip principle is fully covered by patents.

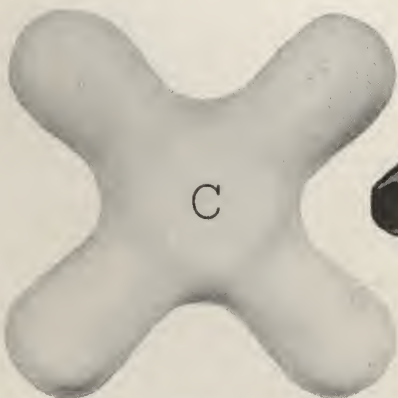


No. 7895—3 in.

For Built-in-Tub Fixtures. Heavy Forged Brass, Chromium Plated. Marked H, C, W or just plain.

No. 7896—2½ in.

Same as above. For Lavatory or Basin Faucets. Marked H and C.



No. 7893—3 in.

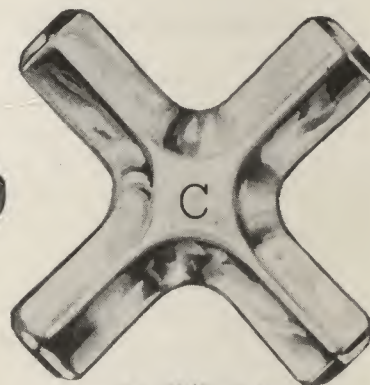
For Built-in-Tub Fixtures. White Porcelain Handles with Chrome Plated Brass Spud. Marked H, C or W.

No. 7894—2½ in.

Same as above. For Lavatory or Basin Faucets. Marked H and C.



No. 7901



No. 7897—3 in.

For Built-in-Tub or Lavatory Fixtures Brass Forged and Chrome Plated. Marked H, C, W or just plain.

Handle and Escutcheon

No. 7901—Multi-Grip Chrome Brass Handle and Escutcheon Housing. Standard size. Height 3¼ x 3" in diameter. Suitable for Lavatory, Bath and Shower fixtures. Will fit 90% of the Bell Escutcheon installations. Instructions for installation come with each escutcheon.



Woodward Wanger Co.



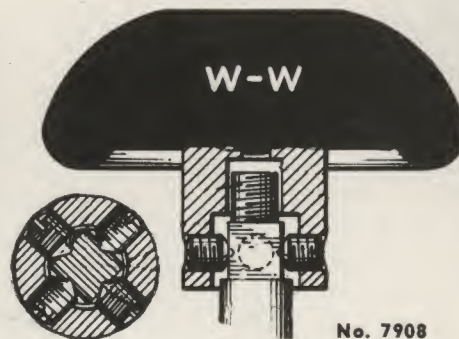
Soap Dish and Radiator Valve Handle Replacements—*Multi-Grip Patent*—



No. 7907

Brass Chrome Plated Soap Dish

Multi-Grip Patent, with four (4) screws. Fits any type stem.



No. 7908

Radiator Valve Handle

Black Moulded Asbestos with Plated spud. Multi-Grip Patent having four (4) screws. Will take round or square spud. Fits male or female thread ends. Diameter of handle $2\frac{1}{2}$ ".

Replacement Handles

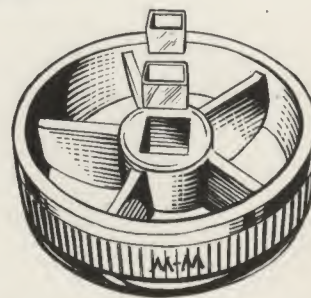


No. 7910

Brass Index Handle

Chrome Handle

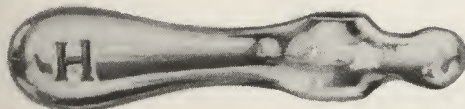
Length $1\frac{3}{4}$ in. Open end type. Equipped with one set screw. Marked H or C.



No. 7911

Radiator Valve Handle

Black Hard Rubber Valve Handle. Diameter $2\frac{1}{4}$ in. Supplied with two (2) square brass sleeve inserts as illustrated, giving the handle three (3) different size adjustments.

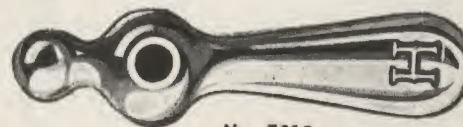


No. 7912

Beaver Tail Brass Handle

Chrome Plated

Fits W-W No. 6655 or No. 6656 Sink Faucet Length $3\frac{3}{4}$ in. Fits W-W No. 6655 and No. 6656 Double Sink Faucet, Bath and Basin Faucets. Marked H on left-hand handle and C on right-hand handle.



No. 7913

Two-Screw Brass Handle

Chrome Plated

Length 3 in. Marked H or C. Has two (2) set screws which hold it firmly to the stem.



Woodward Wanger Co.

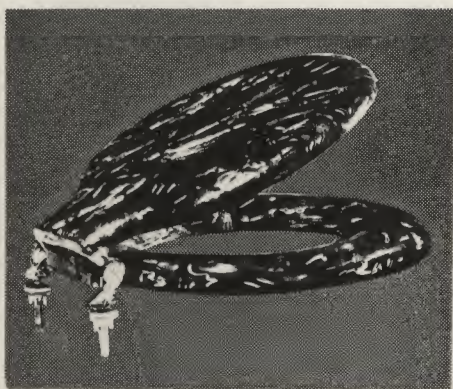


The Ever-White MARINE PEARL SEATS

MARINE Pearl Seats represent the highest expression of the seat maker's art. Their splendid looking, luxurious surfaces are of DuPont Mother-of-Pearl Pyralin and none but the most experienced hands work on the finishing of these seats.

For a good many years Marine Pearl was considered a luxury and found only in the most pretentious bathrooms. Today they can be offered to customers at a price no greater than was asked several years ago for a good white seat.

EXTENDED BACK TYPE



No. 8305-C

Specifications: 11½" Kiln Dried Close Grain Birch or Maple. Extended Back Type. Covering DuPont Marine Pearl Pyralin Sheets. Art-model offset Chromium-plated Hinge.

Catalog Numbers and Colors

- No. 8304-C White Marine Pearl with lid.
- No. 8304½-C White Marine Pearl less lid.
- No. 8305-C Black Marine Pearl with lid.
- No. 8305½-C Black Marine Pearl less lid.
- No. 8306-C Green Marine Pearl with lid.
- No. 8306½-C Green Marine Pearl less lid.

SQUARE BACK TYPE



No. 7991-C

Specifications: 11¼" Kiln Dried close grain Birch or Maple. Square back type. Covering DuPont Marine Pearl Pyralin Sheets. Sturdy all-brass Bar-type hinge, Chromium-plated.

Catalog Numbers and Colors

- No. 7990-C White Marine Pearl with lid.
- No. 7990½-C White Marine Pearl less lid.
- No. 7991-C Black Marine Pearl with lid.
- No. 7991½-C Black Marine Pearl less lid.
- No. 7992-C Green Marine Pearl with lid.
- No. 7992½-C Green Marine Pearl less lid.

At slight additional cost we make the above seats in special colors, providing sample of color is sent as a guide. No seat made up in a special color can be returned.

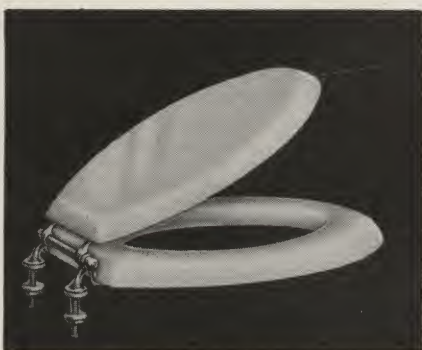


Woodward Wanger Co.



The Ever-White **SHEET COVERED SEATS**

For a covering on Sheet Seats we use Pyralin. This Pyralin is the famous DuPont Pyralin. Not an imitation, but genuine DuPont Pyralin which costs more. Here in our plant we have worked very close with the DuPont organization in developing an extremely fine, smooth, high lustre, long-lasting finish.



No. 8000-C

No. 8000-C

Square Back, Bar Hinge

Specifications: 11/4" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Chromium-plated all-brass Bar Hinge.

No. 8000-C—As illustrated, with lid.

No. 8000 1/2-C—Same seat, without lid.



No. 8002-C

No. 8002-C

Square Back, Open Front

Specifications: 11/4" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Chromium-plated all-brass Bar Hinge.

No. 8002-C —As illustrated, with lid.

No. 8002 1/2-C. —Same seat, without lid.



No. 7999-C

No. 7999-C

Square Back, Bar Hinge

Specifications: 1" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Chromium-plated all-brass Bar Hinge.

No. 7999-C—As illustrated, with lid.

No. 7999 1/2-C—Same seat, without lid.



Woodward Wanger Co.



The Ever-White SHEET COVERED SEATS

For a covering on Sheet Seats we use Pyralin. This Pyralin is the famous DuPont Pyralin. Not an imitation, but genuine DuPont Pyralin which costs more. Here in our plant we have worked very close with the DuPont organization in developing an extremely fine, smooth, high lustre, long-lasting finish.



No. 8200-W

No. 8200-W

Extended Back Type

Specifications: 1 1/2" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin. Brass offset Post Hinge covered with liquid Pyralin making an all-white seat.

No. 8200-W—As illustrated, with lid.

No. 8200 1/2-W—Same seat, without lid.



No. 8202-W

No. 8202-W

Extended Back, Open Front

Specifications: 1 1/2" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin. Brass offset Post Hinge covered with liquid Pyralin making an all-white seat.

No. 8202-W—As illustrated, with lid.

No. 8202 1/2-W—Same seat, without lid.



No. 8200-C

No. 8200-C

Extended Back Type

Specifications: 1 1/2" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Chromium-plated Art-model offset Hinge.

No. 8200-C—As illustrated, with lid.

No. 8200 1/2-C—Same seat, without lid.



Woodward Wanger Co.



The Ever-White SHEET COVERED SEATS

For a covering on Sheet Seats we use Pyralin. This Pyralin is the famous DuPont Pyralin. Not an imitation, but genuine DuPont Pyralin which costs more. Here in our plant we have worked very close with the DuPont organization in developing an extremely fine, smooth, high lustre, long-lasting finish.



No. 8205-C

No. 8205-C

Extended Back, Open Front

Specifications: 1 1/2" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Chromium-plated Art-model off-set Hinge.

No. 8205-C—As illustrated, with lid.

No. 8205 1/2-C—Same seat, without lid.



No. 8004-C

No. 8004-C

Open Front for Extended Lip or Elongated Bowl

Specifications: 1 1/4" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Extra heavy Brass Hinge Chromium-plated.

No. 8004-C—As illustrated, with lid.

No. 8004 1/2-C—Same seat, without lid.



No. 8005-C

No. 8005-C

Open Front and Back for Extended Lip or Elongated Bowl

Specifications: 1 1/2" Kiln Dried close grain Birch or Maple. Covering DuPont White Sheet Pyralin, highly polished. Extra heavy Brass Hinge Chromium-plated.

No. 8005-C.—As illustrated, with lid.

No. 8005 1/2-C.—Same seat, without lid.



Woodward Wanger Co.



The Ever-White SEAMLESS SEATS

Our sprayed seats are covered with Cellulose cotton base lacquer. This is different from synthetic lacquers and will not peel, craze or turn yellow.



No. 8333

No. 8333

Square Back Type

Specifications: 1 1/4" Kiln Dried close grain Birch or Maple. Covering DuPont White Pyralin in liquid form. All-brass Bar Hinge, Chromium-plated.

No. 8333—As illustrated, with lid.

No. 8333 1/2—Same seat, without lid.



No. 8334

No. 8334

Square Back, Open Front

Specifications: 1 1/4" Kiln Dried close grain Birch or Maple. Covering DuPont White Pyralin in liquid form. All-brass Bar Hinge, Chromium-plated.

No. 8334.—As illustrated, with lid.

No. 8334 1/2—Same seat, without lid.



No. 8329

No. 8329

Square Back Type

Specifications: 1" Kiln Dried close grain Birch or Maple. Covering DuPont White Pyralin in liquid form. All-brass Bar Hinge, Chromium-plated.

No. 8329—As illustrated, with lid.

No. 8329 1/2—Same seat, without lid.



Woodward Wanger Co.



MAHOGANY SEATS



No. 8019

No. 8019

Specifications: 1 1/4" Kiln Dried Maple. The smooth dull finish on which we have been highly complimented is due to the time and care we put on the finish. It really looks like mahogany. Has a rolled Chrome Bar Hinge.

No. 8019—As illustrated, with lid.

No. 8019 1/2—Same seat, less lid.



No. 8020

No. 8020

Open Front Type

Specifications: 1 1/4" Kiln Dried Maple. The smooth dull finish on which we have been highly complimented is due to the time and care we put on the finish. It really looks like mahogany. Has a rolled Chrome Bar Hinge.

No. 8020—As illustrated, with lid.

No. 8020 1/2—Same seat, without lid.

OAK SEATS



No. 8021

No. 8021

Specifications: 1 1/4" Kiln Dried Oak. We use a rubbed oil finish, instead of the usual cheap varnish. This highly enhances the appearance of the seat. Has a rolled Chrome Bar Hinge.

No. 8021—As illustrated, with lid.

No. 8021 1/2—Same seat, without lid.



No. 8022

No. 8022

Open Front Type

Specifications: 1 1/4" Kiln Dried Oak. Seat has a smooth soft satin finish, instead of the usual high luster, cheap varnish finishes. This greatly enhances the appearance of the seat. Rolled Chrome Bar Hinge.

No. 8022—As illustrated, with lid.

No. 8022 1/2—Same seat, less lid.



Woodward Wanger Co.



HARD RUBBER SEATS

No. 8050

Open Front for Regular Bowl



Government Type

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Concealed type Brass Hinge moulded into the rubber. Posts also covered with hard rubber so there is no metal exposed. Regularly furnished with check on seats without cover. If no check is desired, please specify.

No. 8050—Seat as illustrated without lid.

No. 8050 $\frac{1}{2}$ —Seat with lid.

No. 8051

Closed Front for Regular Bowl



Government Type

Specifications: Black Hard Rubber Seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and Alkali-proof. Heavy Brass Rubber covered Hinge attached to Brass inserts. No metal exposed. Regularly furnished with check. Can be furnished without check if so specified.

No. 8051—Seat as illustrated without lid.

No. 8051 $\frac{1}{2}$ —Seat with lid.

No. 8052

Open Front, Saddled Seat



Government Type

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Cast Brass Post Hinge moulded into the rubber. No metal exposed. Regularly furnished with check. Can be furnished without check if so specified. Chromium-plated Hinge if desired, at same price.

No. 8052—Seat as illustrated without lid.

No. 8052 $\frac{1}{2}$ —Seat with lid.

No. 8053

Open Front for Elongated Bowl



Government Type

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Cast Brass Post Hinge moulded into the rubber. No metal exposed. Regularly furnished with check. Can be furnished without check if so specified. Chromium-plated Hinge if desired, at same price.

No. 8053—Seat as illustrated, without lid.

No. 8053 $\frac{1}{2}$ —Seat with lid.



Woodward Wanger Co.



HARD RUBBER SEATS

No. 8054

Open Front and Open Back for Regular Bowl

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Hinge is of special construction and screws into a hinge plate moulded into the rubber in the back of the seat. Posts are covered with hard rubber so that no metal is exposed.

No. 8054—Seat as illustrated, without lid.
No. 8054½—Same seat with lid.



Government Type

No. 8055

Open Front and Back for Extended Lip Bowl

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Hinge is of special construction and screws into a hinge plate moulded into the rubber in the back of the seat. Posts are covered with hard rubber so that no metal is exposed.

No. 8055—Seat as illustrated, without lid.
No. 8055½—Same seat, with lid.



Government Type

No. 8056

Open Front and Back for Extended Lip Bowl

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Hinge is of special construction and screws into a hinge plate moulded into the rubber in the back of the seat. Posts are covered with hard rubber so that no metal is exposed.

No. 8056—Seat as illustrated, without lid.
No. 8056½—Same seat, with lid.



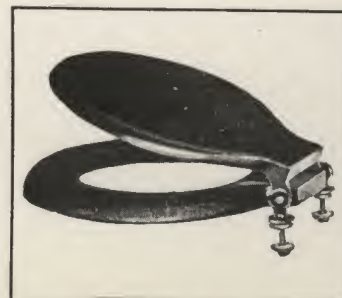
Government Type

No. 8057

Closed Front with Lid for Regular Bowl

Specifications: Black Hard Rubber seat with hollow core. Surface highly polished. Seamless inside and outside. Acid resisting and alkali-proof. Concealed type Brass Hinge moulded into the rubber. Posts also covered with hard rubber so there is no metal exposed. Regularly furnished with check on seats without cover. If no check is desired, please specify.

No. 8057—Seat as illustrated, with lid.
No. 8057½—Same seat, without lid.



Government Type

All Four (4) Seats shown above meet Government Specifications.



Woodward Wanger Co.



Quality Tools

Bent Picking Chisel



No. 8501

No. 8501.....8 in. long

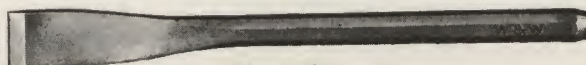
Brick Chisel



No. 8502

No. 8502..... $\frac{1}{2}$ in. x 10 in. long

Brick Chisel



No. 8503

No. 8503..... $\frac{5}{8}$ in. x 12 in. long

No. 8503 $\frac{1}{2}$ $\frac{3}{4}$ in. x 24 in. long

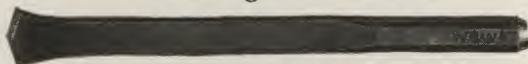
Cape Chisel



No. 8504

No. 8504..... $\frac{1}{2}$ in. x 7 $\frac{1}{2}$ in. long

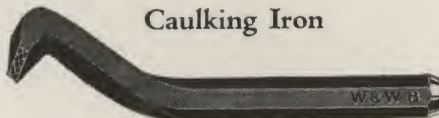
Caulking Iron, Double



No. 8506

No. 8506.....10 in. long

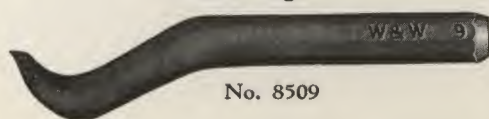
Caulking Iron



No. 8508

No. 8508..... $\frac{1}{8}$ in. bend, outside 6 in. long

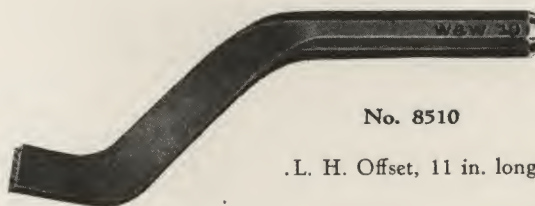
Caulking Iron



No. 8509

No. 8509..... $\frac{1}{8}$ in. bend, inside, 6 in. long

Caulking Iron



No. 8510

.L. H. Offset, 11 in. long

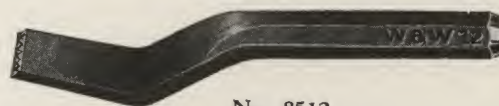
Caulking Iron



No. 8511

.R. H. Offset, 11 in. long

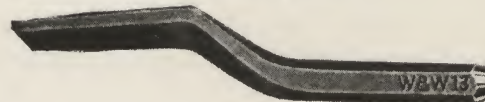
Caulking Iron



No. 8512

No. 8512.....9 in. long

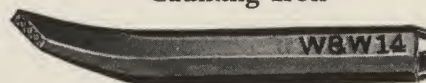
Caulking Iron



No. 8513

No. 8513.....Short, $\frac{6}{4}$ in. long

Caulking Iron



No. 8514

No. 8514.....Outside stub, 5 in. long



Woodward Wanger Co.



Quality Tools

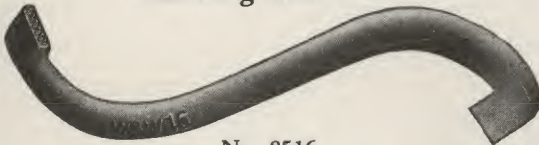
Caulking Iron



No. 8515

No. 8515.....Inside stub, 5 in. long

Caulking Iron



No. 8516

No. 8516....."S" shape

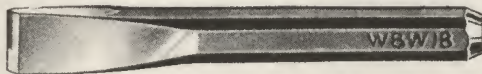
Cold Iron Chisel



No. 8517

No. 8517.....1/2 in. x 6 in. long

Cold Iron Chisel



No. 8518

No. 8518.....3/4 in. x 7 1/2 in. long

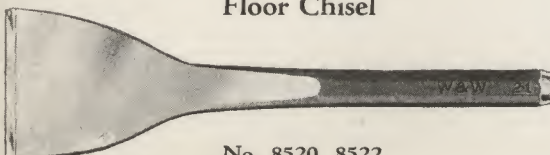
Diamond Nose Chisel



No. 8519

No. 8519.....7 in. long

Floor Chisel



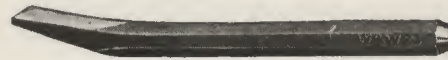
No. 8520 8522

No. 8520.....5/8 in. x 10 in. x 2 in.

No. 8521.....5/8 in. x 11 in. x 2 1/2 in.

No. 8522.....1 1/8 in. x 12 in. x 3 in.

Gasket Iron



No. 8523

No. 8523.....1/8 in. bend, 7 in. long

Gasket Iron



No. 8524.....5/8 in. x 12 in. long

No. 8525.....5/8 in. x 15 in. long

No. 8526.....5/8 in. x 17 in. long

Spring Gasket Iron



No. 8527

No. 8527.....5/8 in. x 18 in. long

Heavy Curved Packing Chisel



No. 8528

No. 8528.....5/8 in. x 7 1/2 in. x 1 1/2 in.

Round Nose Chisel



No. 8529

No. 8529.....7 in. long



Woodward Wanger Co.



Quality Tools

Star Drill



No. 8530

No. 8530..... $\frac{3}{4}$ in. x 12 in. x 1 in.

No. 8530 $\frac{1}{2}$ $\frac{3}{4}$ in. x 24 in. x 1 in.

Star Drill



No. 8531

No. 8531..... $\frac{1}{2}$ in. x 12 in. x $\frac{3}{4}$ in.

No. 8531A..... $\frac{1}{4}$ in. x 12 in. x $\frac{3}{8}$ in.

No. 8531B..... $\frac{3}{8}$ in. x 12 in. x $\frac{1}{2}$ in.

Straight Joint Chisel



No. 8532

No. 8532.....9 in. long

Wood Chisel



No. 8533

No. 8533..... $\frac{3}{4}$ in. x 10 in. long

No. 8533 $\frac{1}{2}$ $\frac{1}{2}$ in. x 9 in. long

Wood Chisel



No. 8534

No. 8534..... $\frac{9}{16}$ in. x 11 in. x 1 in.

No. 8534 $\frac{1}{2}$ $\frac{5}{8}$ in. x 10 $\frac{1}{4}$ in. x 1 $\frac{1}{4}$ in.

Wood Gouge



No. 8535

Outside bevel, $\frac{5}{8}$ " x 12" x 1 $\frac{1}{8}$ "

Caulking Iron



No. 8536

No. 8536.....Outside, 7 in. long

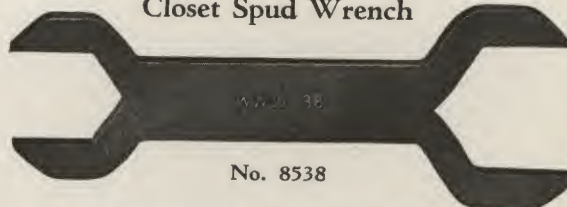
Caulking Iron



No. 8537

No. 8537.....Inside, 7 in. long

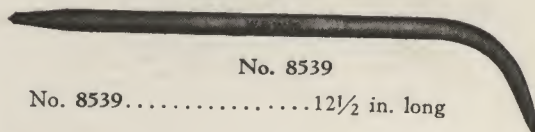
Closet Spud Wrench



No. 8538

No. 8538—(Highly Tempered Steel—Jaws will not spring), 11 $\frac{1}{2}$ in. long—sizes 1 $\frac{1}{4}$ in. and 2 in.

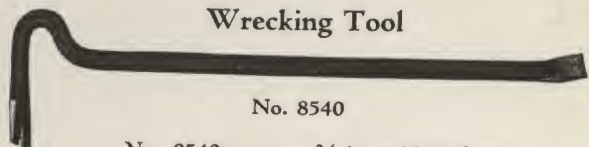
Bending Pin



No. 8539

No. 8539.....12 $\frac{1}{2}$ in. long

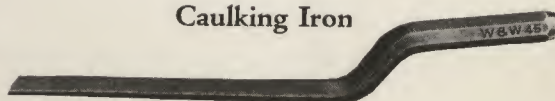
Wrecking Tool



No. 8540

No. 8540..... $\frac{3}{4}$ in. x 30 in. long

Caulking Iron



No. 8544.....R. H. Offset, 15 $\frac{1}{2}$ in. long

No. 8545....L. H. Offset, 15 $\frac{1}{2}$ in. long

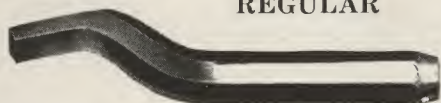


Woodward Wanger Co.



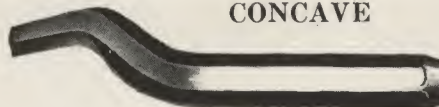
Water Main Caulking Tools

REGULAR



Nos. 8551-A-B-C-D-E-F-G-H-I

CONCAVE



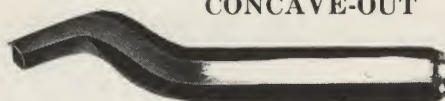
Nos. 8552-A-B-C-D-E-F-G-H-I

CONCAVE-IN



Nos. 8553-A-B-C-D-E-F-G-H-I

CONCAVE-OUT



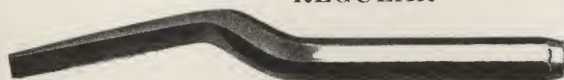
Nos. 8554-A-B-C-D-E-F-G-H-I

Any Catalog Number Plus	A	B	C	D	E	F	G	H	I
Blade Thickness	1/8	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8
Blade Width	1	1	1	1	1	1	1	1	1
Stock	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8	7/8
Length	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4	6 3/4

THE CATALOG NUMBER DESIGNATES THE STYLE OF TOOL AND THE LETTER FOLLOWING THE NUMBER DESIGNATES THE WIDTH, THICKNESS AND LENGTH.

Water Main Yarning Tools

REGULAR



No. 8555-A No. 8555-B

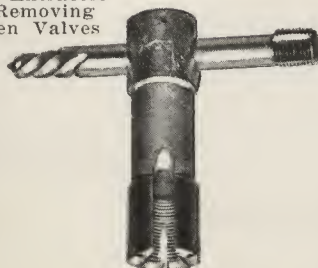
CONCAVE



No. 8556-A No. 8556-B

Number with A or B	A	B
Blade Thickness	1/16	1/8
Blade Width	1	1
Stock	7/8	7/8
Length	10 3/4	10 3/4

Screw Extractor
for Removing
Broken Valves



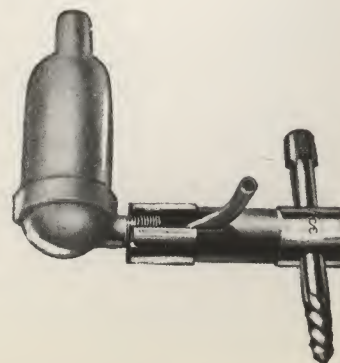
1/8" Pipe Die for
Re-threading Valves
Slot to Accomodate
Bent Stem on Valve

1/8" Pipe Tap
for Retapping Hole
in Radiator

Radiator Tool

No. 8565

Here is a handy little Radiator tool that every Plumber and every Journeyman should carry. Has many uses and eliminates carrying several tools. Also useful on Oil Burner repair Jobs.





Woodward Wanger Co.



The "Clipper" Line OF CLEANING TOOLS



Journeyman: "Good Morning, I am from the Blank Plumbing Co. I came to repair the stoppage in one of your fixtures."
Customer: "Oh, yes, but is that all the tools you brought?"



Customer: "My, what a neat arrangement, so clean and compact."
Journeyman: "Yes, this is the modern way of cleaning drains. No more dragging old dirty wires into the house, scratching furniture and staining rugs. My wire is all in this container."



Journeyman: Here's another cleaning job. I used the new "Clipper" cleaning wire and it certainly works fine. Did the job quickly and made a good impression on the customer."
Master Plumber: "Yes, that tool is certainly paying for itself and has built a lot of good will for us."





Woodward Wanger Co.



"CLIPPER" CLEANING WIRES

GUARANTEE

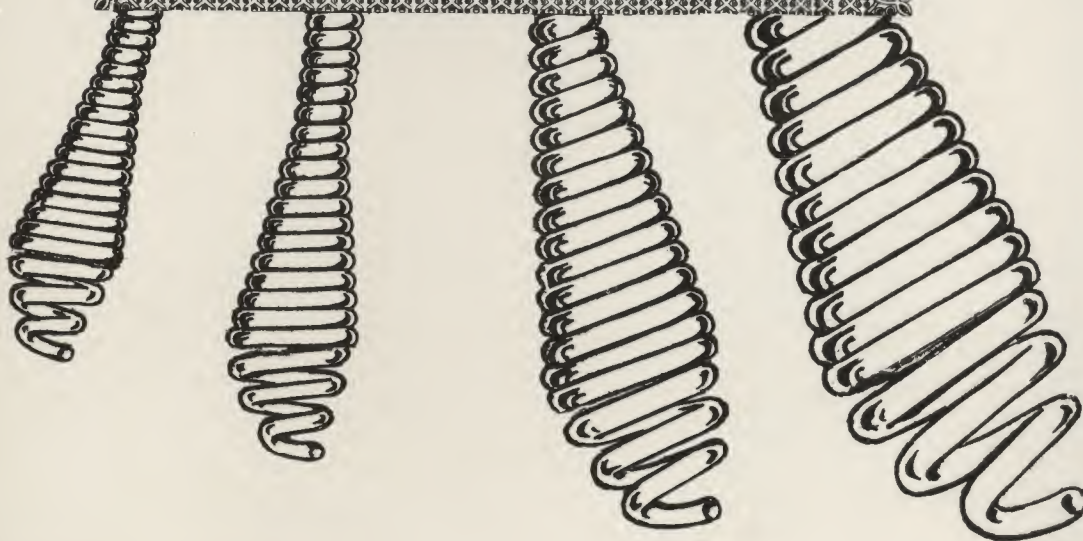
We guarantee this Clipper Cleaning Tool for a period of six months from date of receipt. If within that time it should show a defect in material or workmanship, we will

REPLACE IT FREE OF CHARGE

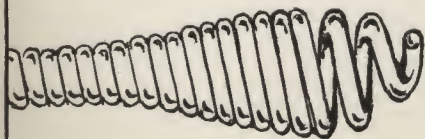
PROVIDED:- You sign and return the enclosed card within three days after receipt of the Tool. Card must be signed and in our files in order to protect you.

WOODWARD-WANGER COMPANY

PHILADELPHIA, PENNA.



New "GIMLET



TYPE HEAD

As the name implies, this "Gimlet" type head will cut its way through obstructions quickly. Being a flexible head it will not catch on shoulders of pipe, nor on threads or nuts, but goes around sharp bends easily. It will catch and permit the pulling out of rags and similar obstructions.



Woodward Wanger Co.

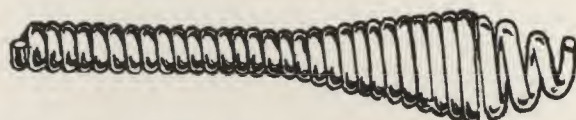


"CLIPPER" CLEANING WIRES

These wires are made from Imported Swedish Steel. They are heat treated and case hardened with expert precision. They flex easily, take sharp bends readily, yet spring back quickly to their original shape.

Our confidence in these wires is shown by the definite manner in which we guarantee each one. This guarantee is for a period of six (6) months.

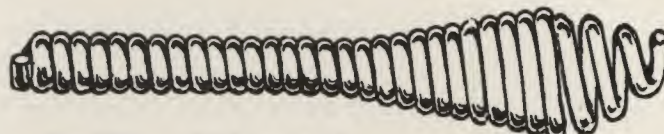
Before shipping each wire is "stretched" to remove all false stiffness from it and it arrives ready for use.



1/4" Wire

No. 8566 — 1/4" x 15 ft.

No. 8566-A — 1/4" x 25 ft.

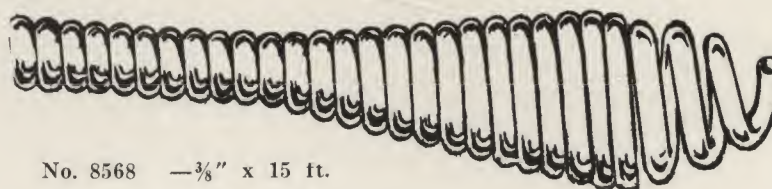


5/16" Wire

No. 8567 — 5/16" x 15 ft.

No. 8567-A — 5/16" x 25 ft.

No. 8567-B — 5/16" x 50 ft.

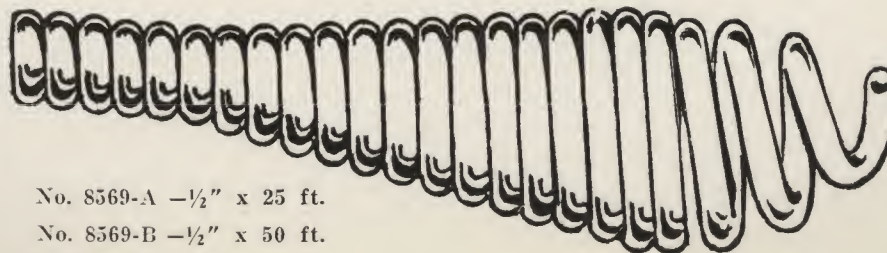


3/8" Wire

No. 8568 — 3/8" x 15 ft.

No. 8568-A — 3/8" x 25 ft.

No. 8568-B — 3/8" x 50 ft.



1/2" Wire

No. 8569-A — 1/2" x 25 ft.

No. 8569-B — 1/2" x 50 ft.

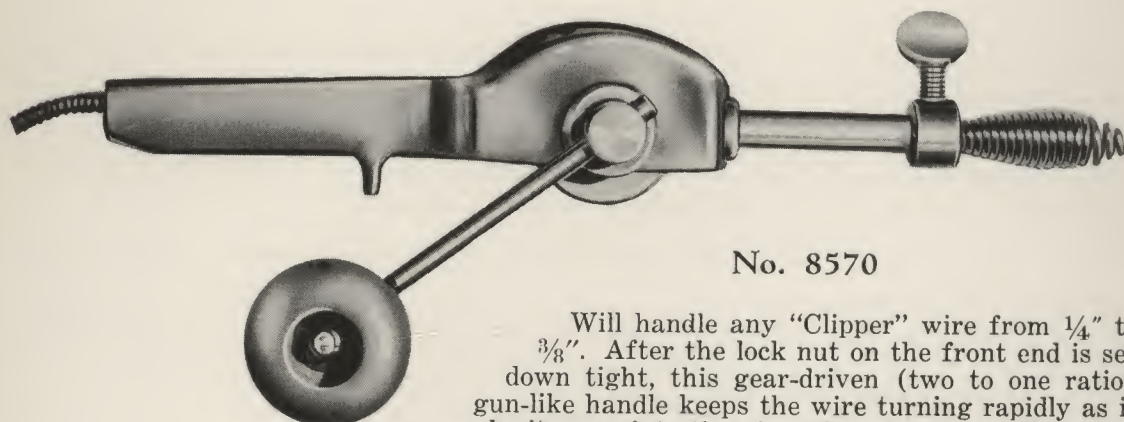
No. 8569-C — 1/2" x 75 ft.



Woodward Wanger Co.



"CLIPPER" SPEED DRIVE



No. 8570

Will handle any "Clipper" wire from $\frac{1}{4}$ " to $\frac{3}{8}$ ". After the lock nut on the front end is set down tight, this gear-driven (two to one ratio) gun-like handle keeps the wire turning rapidly as it works its way into the pipe. Due to the rapid turning of the wire and the improved "Gimlet" head, it quickly digs and cuts its way through the obstruction in the pipe.

"CLIPPER" WIRE CONTAINER



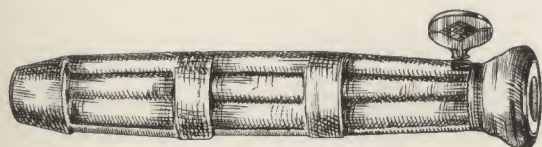
No. 8571

No. 8571

Makes the transportation of wires quick and easy. It permits carrying 25 ft. or 50 ft. wires into the home in a clean, sanitary manner. Wires always under control, no flipping around on the floors, scratching furniture or wallpaper or marking the rugs. Keeps wires in better condition too and prevents the possibility of their kinking or being dented by lying around the shop or the floor of the truck.

Entering homes with this kind of modern equipment builds respect in the customer's mind for your up-to-dateness and your efficiency. It's the modern and sanitary way to carry cleaning wires.

"Push" Handle



No. 8573

No. 8573—A $5\frac{1}{2}$ " Aluminum handle with no-slip Grip for pushing wires into drains. Lock Nut prevents the handle from slipping.

ROTARY HANDLE



No. 8574

No. 8574 —Rotary handle, equipped with set screw for holding wire. Rotary motion of handle then turns wire going into drain.



Woodward Wanger Co.



Complete "Clipper" Cleaning Wire Equipment

- (1) "Clipper" Wire with Gimlet Head,
- (2) Patented "Speed" Drive
- (3) "Clipper" Wire Container

To Help the Master Plumber to select adequate Shop Equipment in the way of Cleaning Tools, we have grouped into sets, three different assortments for convenience sake, that we have found to be the assortments most frequently purchased.

Set No. 1

- No. 8566 -Clipper Wire $\frac{1}{4}$ " x 15 ft.
No. 8568-A -Clipper Wire $\frac{3}{8}$ " x 25 ft.
No. 8570 -Patented Speed Drive Handle

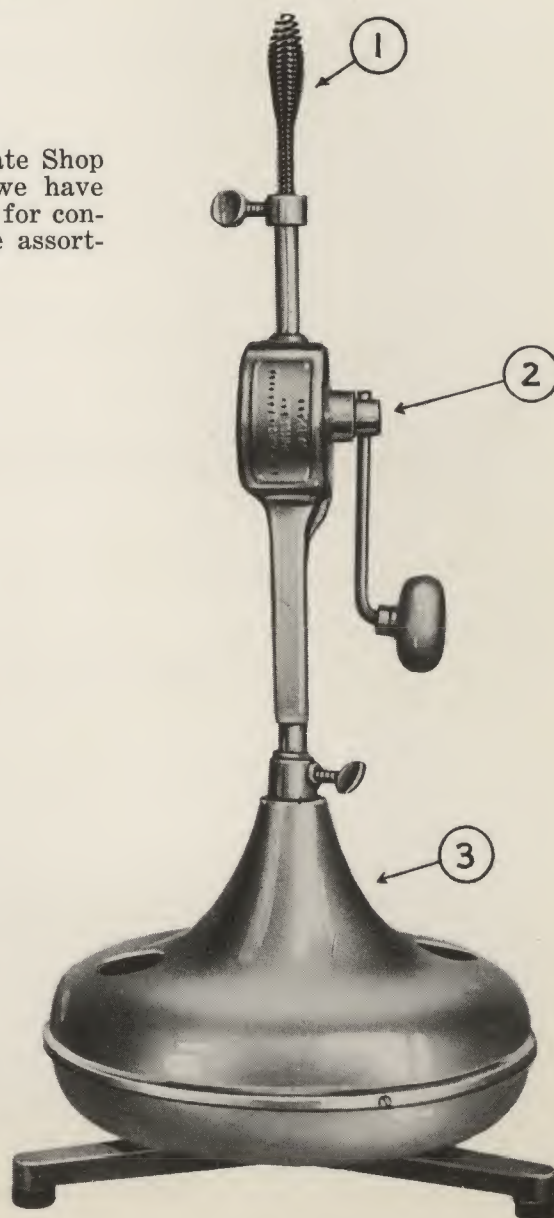
Set No. 2

- No. 8566 -Clipper Wire $\frac{1}{4}$ " x 15 ft.
No. 8567 -Clipper Wire $\frac{5}{16}$ " x 15 ft.
No. 8568-A -Clipper Wire $\frac{3}{8}$ " x 25 ft.
No. 8570 -Patented Speed Drive Handle

Set No. 3

- No. 8566 -Clipper Wire $\frac{1}{4}$ " x 15 ft.
No. 8567 -Clipper Wire $\frac{5}{16}$ " x 15 ft.
No. 8568 -Clipper Wire $\frac{3}{8}$ " x 15 ft.
No. 8568-B -Clipper Wire $\frac{3}{8}$ " x 50 ft.
No. 8570 -Patented Speed Drive Handle

By adding No. 8575 "Husky" Closet Auger with Multi-Coil wire, the Master Plumber is prepared to handle any kind and any type of cleaning job that comes along.

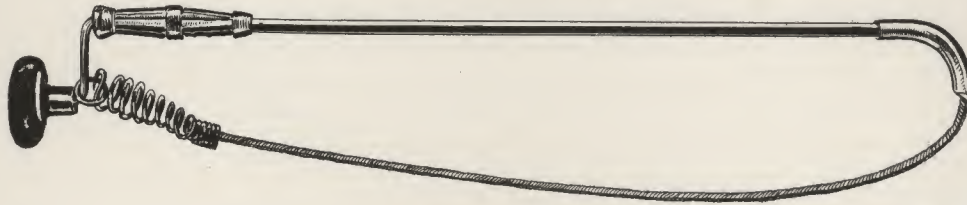




Woodward Wanger Co.



Husky Closet Auger



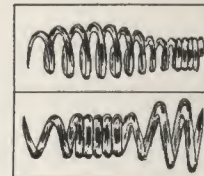
No. 8575

A very light, yet strong and rugged Closet Auger. It weighs approximately 3¼ lbs. The seamless Steel Casing is "sheridized" and the inside of the tube is coated with "asphaltum" to make the casing as nearly rust proof as possible.

Three feet of ⅜" Multi-Coil 21 strand, the toughest wire made, with layers of wire running in different directions. In addition the wire is cadmium plated to retard rust and this greatly increases the life of the wire. Furnished with barrel type spring head, or cone shaped double pointed wire, as specified. Both welded on The "Husky" Auger is guaranteed for six months.

Specify No. 8575-A for Barrel Type Head or No. 8575-B for Cone Type Head

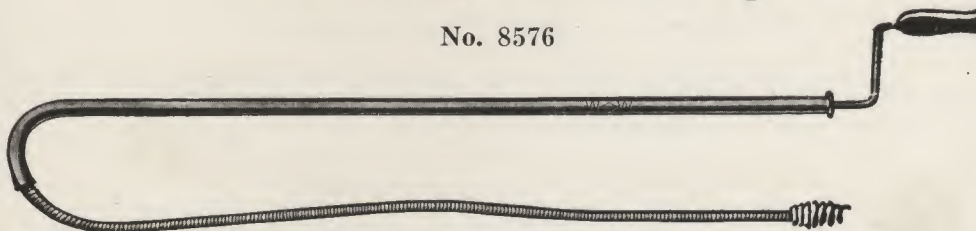
CHOICE OF



TWO HEADS

Economy Closet Auger

No. 8576



Made with Seamless Steel tubing, wooden handle. A well made and very serviceable Closet Auger, made for those who desire a good auger at an inexpensive price. Supplied with barrel type spring head welded on.

Multi-Coil Wire

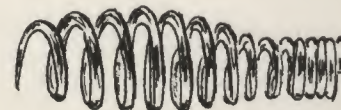


No. 8577

Multi-Coil 21 strand wire is the toughest wire made, with layers of wire running in different directions. In addition we Cadmium plate the wire to make it as nearly as possible rust proof. This increases the life of the wire. If wanted with barrel type or cone type spring head, welded on, please specify, otherwise wire only will be sent.

No. 8577—Multi-Coil Wire per foot. Specify number of feet wanted. Order heads separately.

Spring Type Heads



No. 8578-A



No. 8578-B

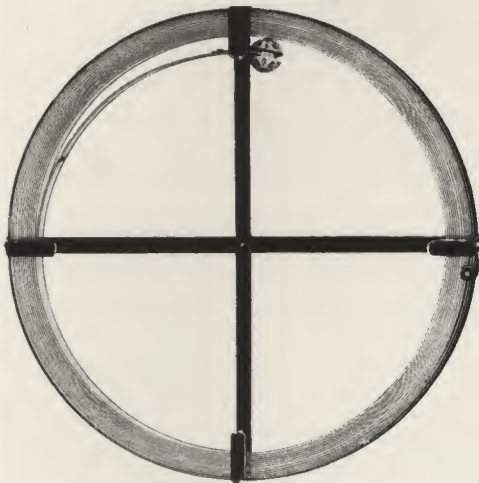
No. 8578-A—Barrel Type Spring Head
No. 8578-B—Cone Type Spring Head



Woodward Wanger Co.



"CLIPPER" CLEANING RODS



With Brass Ball Head

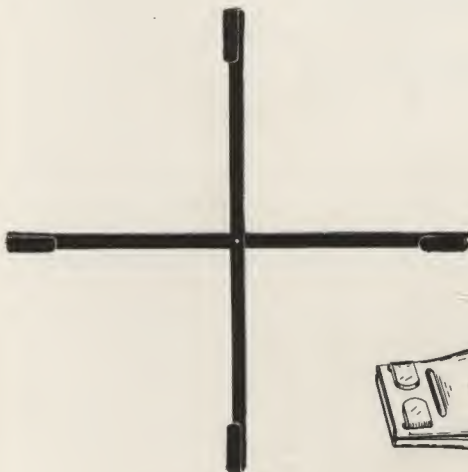
No.	Width	Thick- ness	Length	Dia. of Head
8579	1/4" x 1/8"	1/16"	25 ft.	1/2"
8580	1/4" x 1/8"	1/16"	50 ft.	1/2"

Add "R" After Catalog Number if reel is wanted.

With Revolving Roller Head or Revolving Spear Point Head

No.	Width	Thick- ness	Length	Dia. of Head
8581	1/2" x 1/8"	1/16"	25 ft.	1"
8582	1/2" x 1/8"	1/16"	50 ft.	1"
8583	3/4" x 1/8"	1/8"	25 ft.	1 1/2"
8584	3/4" x 1/8"	1/8"	50 ft.	1 1/2"
8585	3/4" x 1/8"	1/8"	75 ft.	1 1/2"
8586	3/4" x 1/8"	1/8"	100 ft.	1 1/2"
8587	1 1/4" x 1/8"	1/8"	75 ft.	2 7/8"
8588	1 1/4" x 1/8"	1/8"	100 ft.	2 7/8"

Add "R" After Catalog Number if reel is wanted.



Reel or Holder for Rods

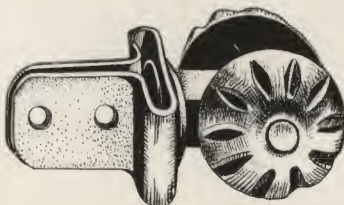
No. 8589-B	.....for 1/4" and 1/2" Sizes
No. 8589-A	.....for 3/4" and 1 1/4" Sizes

Self Adjusting Handle 5" Long



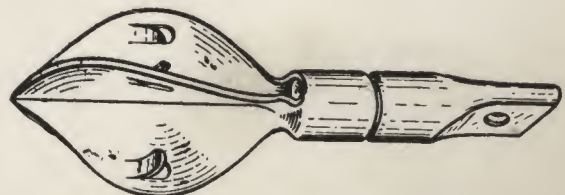
No. 8590	for 1/2" Rods
No. 8590-A	for 3/4" Rods

Revolving Iron Head



No. 8591	-1" O. D. for 1/2" Rods
No. 8591-A	-1 1/2" O. D. for 3/4" Rods
No. 8591-B	-2 7/8" O. D. for 1 1/4" Rods

Revolving Spear Head



No. 8592	-1 1/4" O. D. for 1/2" Rods
No. 8592-A	-2" O. D. for 3/4" Rods
No. 8592-B	-2 3/4" O. D. for 1 1/4" Rods

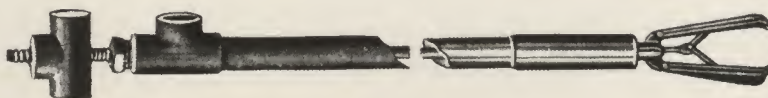


Woodward Wanger Co.



CLEANERS and GRAPPLERS

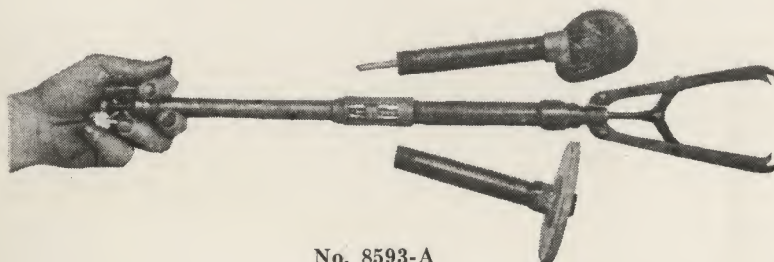
GRAPPLER—5 ft. 6" long.



No. 8593

This unique and extremely efficient plumber's tool is what every plumber needs for removing obstructions from drains, rain conductors, hoppers, cesspools, water boxes and curb traps. It works like a human hand, opening and closing at the will of the operator. A practical and almost indispensable tool for the plumber. Another unique feature is that it can be extended to any length. The best tool of its kind on the market.

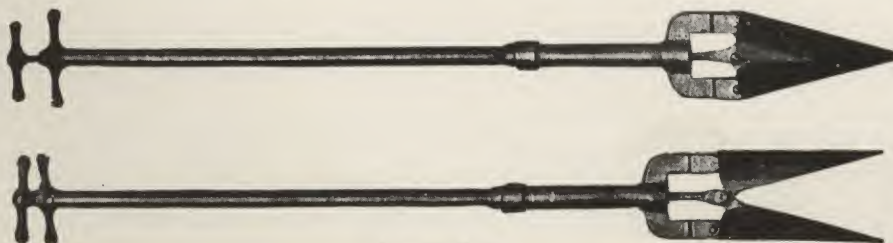
COMBINATION TOOL—5 ft. 6" long.



No. 8593-A

No. 8593-A is a combination tool—three-in-one. It has a spoon, plunger and grapple combined. These parts are easily and quickly changed, so that you have at hand always the efficiency of three different and distinct tools by merely carrying the interchangeable parts. A set screw holds them in place. The stem is used in all cases, and can be extended to any length desired by using a longer extension piece. All three may be needed on one job. If so, you have something to meet any condition.

STOP BOX CLEANER—5 ft. 6" long.



No. 8593-B

No. 8593-B is a Stop Box Cleaner, and we believe it to be the best of its kind. It works like a pair of scissors. It is constructed of two steel shovels that open and close and it will clean out sand, bricks or any other obstruction. Can be extended to any length. Opens up to 3" to 4" diameter. Illustration shows the cleaner open and also closed.



Woodward Wanger Co.

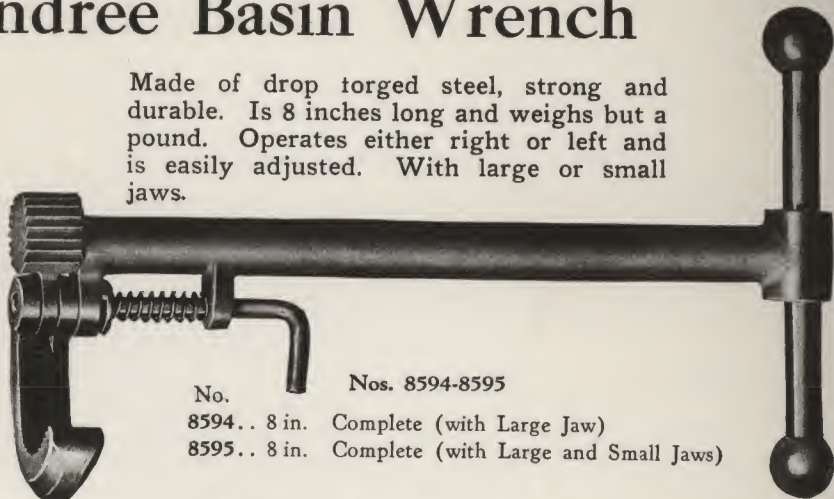


Andree Basin Wrench

REVERSIBLE JAW
OPERATES EITHER
RIGHT OR LEFT

Made of drop forged steel, strong and durable. Is 8 inches long and weighs but a pound. Operates either right or left and is easily adjusted. With large or small jaws.

No. Part
8595-A—Small Jaw
8595-B—Large Jaw
8595-C—Bolt
8595-D—Spring
8595-E—Pin
8595-F—Washer



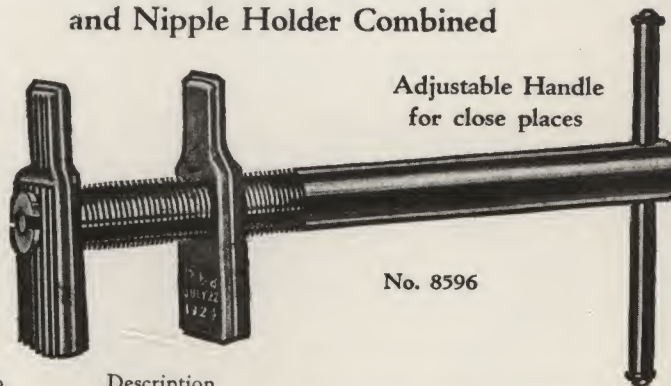
No. Nos. 8594-8595
8594.. 8 in. Complete (with Large Jaw)
8595.. 8 in. Complete (with Large and Small Jaws)

Closet Spud Holder

and Nipple Holder Combined

ADAPTED FOR ALL SIZES
OF CLOSET SPUDS

Jaws
Drop
Forged
from
Tool Steel



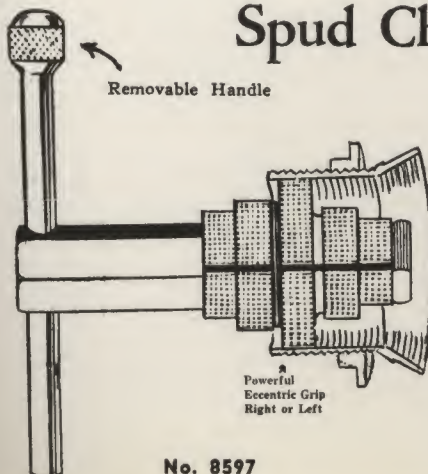
Adjustable Handle
for close places

Handiest
Internal
Gripping
Tool
Ever
Devised

No. 8596

No. Description
8596..... Closet Spud Holder and Nipple Holder, Combined

Spud Chuck or Nipple Extractor

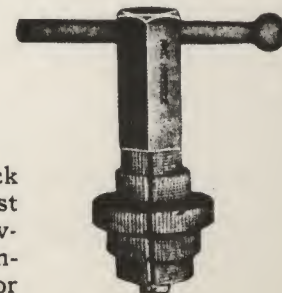


Removable Handle

Powerful
Eccentric Grip
Right or Left

No. 8597

Designed for internal holding on hollow work. Invaluable for holding Closet Bowl Spuds, of any size, hence the name, Spud Chuck. This Spud Chuck will hold equally well against right or left pressure in removing or replacing fixtures. Entirely free from threads or gears. It expands by powerful eccentric action. All steel and plated to resist rust. Should last a lifetime.



No. 8597

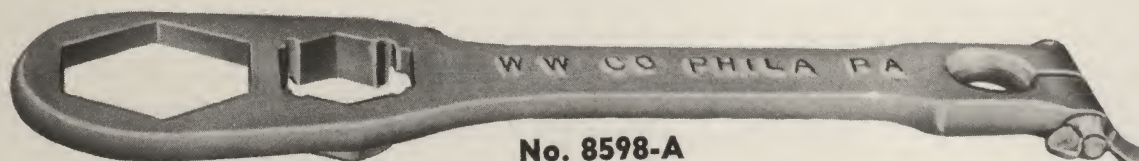


Woodward Wanger Co.

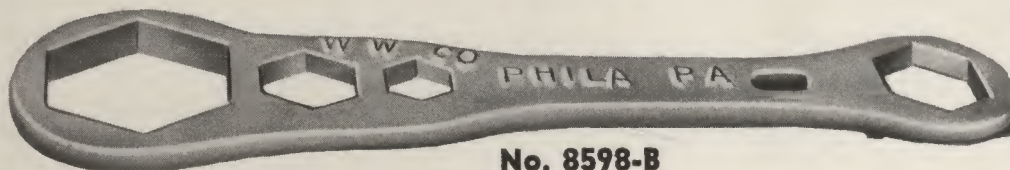


Sloan Valve Tools

Tools made especially for repair work on Sloan Valves. This pair of Wrenches are designed especially for disassembling Sloan Valves for repair work. Both are needed. Order in pairs.



No. 8598-A



No. 8598-B

No. 8598—Set of Two Tools. Use "A" and "B" if ordered separately.

Emergency Tool

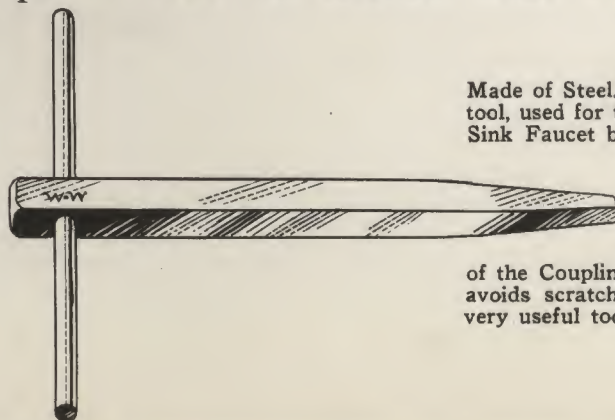


No. 8599

An Improved 6-in-1 tool with recessed guides.

1. Die for cutting $1\frac{1}{2}$ " tubes.
 2. Die for cutting $1\frac{1}{4}$ " tubes.
 3. Die for Ballcock Rods.
 4. Wrench for $1\frac{1}{4}$ " Closet Bowl Spud.
 5. Wrench for 2" Closet Bowl Spud.
 6. Key Wrench for Waste, etc.
- Made of Tool Steel

Special Tool for Double Sink Faucet Couplings



No. 8600

Made of Steel. Length $7\frac{3}{4}$ ", diameter $\frac{1}{2}$ ". A special tool, used for tightening up the couplings on a Double Sink Faucet by inserting the end in the square Hole

of the Coupling. Eliminates the use of a wrench and avoids scratching outside plating on the fixture. A very useful tool.



Woodward Wanger Co.



Leather Tool Bag



No. 8608

Made from a selected quality of black leather and constructed in the best possible manner.

Has three-ply bottom, equipped with steel studs, substantial handle,

Shoulder strap has broad comfortable pad for the shoulder. Retaining straps of good width pass entirely around the bag and keep it in shape, even when overloaded.

No.	Size
8608.....	22 in. long x 8 in. high

Khaki Floor Mat

No. 8611

Made of heavy, long wearing Khaki material. Indispensable when doing repair work in the home. Keep customers happy by keeping the job clean. Keeps tools and materials from scratching and marring woodwork and tile. Keeps dirt and grease off the floor. Size 36" x 54"



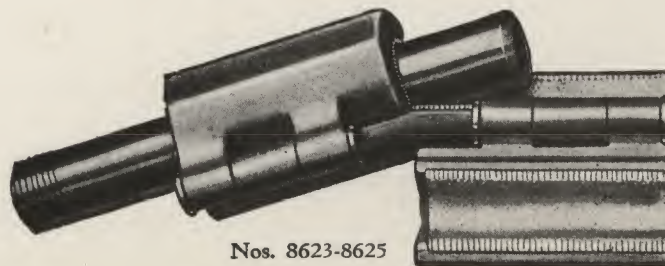
Bending Springs



Made of Spiral Crucible Tool Spring

No.	Size	
8615.....	1 in.	8617..... 1½ in.
8616.....	1¼ in.	8618..... 2 in.

Kink Klamps



Nos. 8623-8625

Designed to hold Nickel Plated and Chrome Plated pipe in Vise, to prevent the polished surface from being scratched.

No.	Holds Pipe
8623.....	⅜ and ½ in.
8624.....	½ and ¾ in.
8625.....	1¼, 1⅜ and 1½ in.
8626.....	¾ and 1 in.



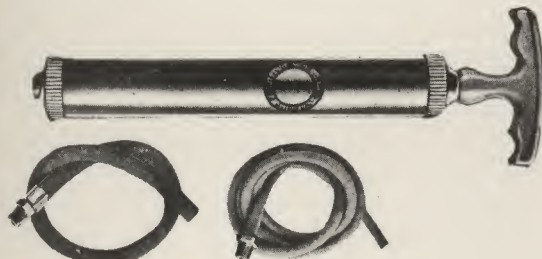
Woodward Wanger Co.



Force and Suction Pumps

Drain and Suction Pump

No. 8630



For draining bath, basin and sink traps, also Closet Bowls when houses are being closed for the season. A real time saver. The small rubber hose will pass through the holes in sink strainer and the pump quickly removes all water in the trap. The larger hose is designed to clear out syphon jet in bowls.

Strongly made with heavy gauge Brass barrel $1\frac{1}{2}$ " O.D. and 9 inches long, polished and lacquered. Heavy cast tee handle in Cadmium finish. Boxed separately.

Force and Suction Pump

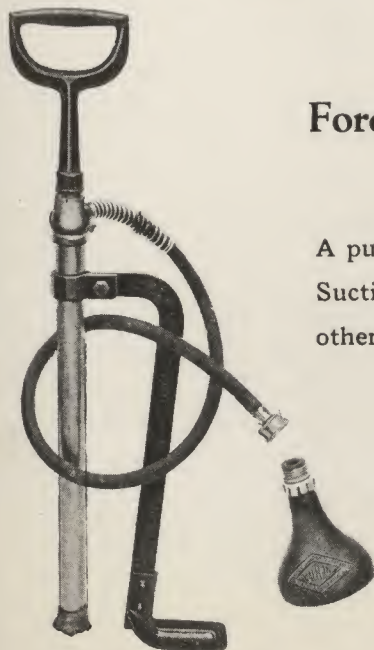
No. 8631

A pump that will clear out plumbing stoppages in the home quickly and efficiently. Has $1\frac{1}{2}$ " O.D. x 9 inches. Rubber cup $4\frac{5}{8}$ ". Use water and operate the pump with both force and suction action of the plunger. On the upstroke it creates a powerful suction, and a tremendous pressure on the down stroke. The suction action breaks up or dislodges the stoppage in the line.



Force and Suction Pump

No. 8632



A pump with a dual purpose. Can be used as a force pump—or a Suction Pump. Some Plumbers use it for pumping Leakure and other boiler liquids, from a bucket to the Heating System, through the Boiler drain valve.

It can also be used with Plumber's Friend or Force Cup, for clearing out clogged up Basin, Bath and Sink drains. This Pump is very strongly built of Brass and Bronze, with heavy cast iron handle and stirrup. There is constant need for such a pump in every plumbing shop.



Woodward Wanger Co.



Extension Light and Cord

Trouble Light and Cord

No. 8633

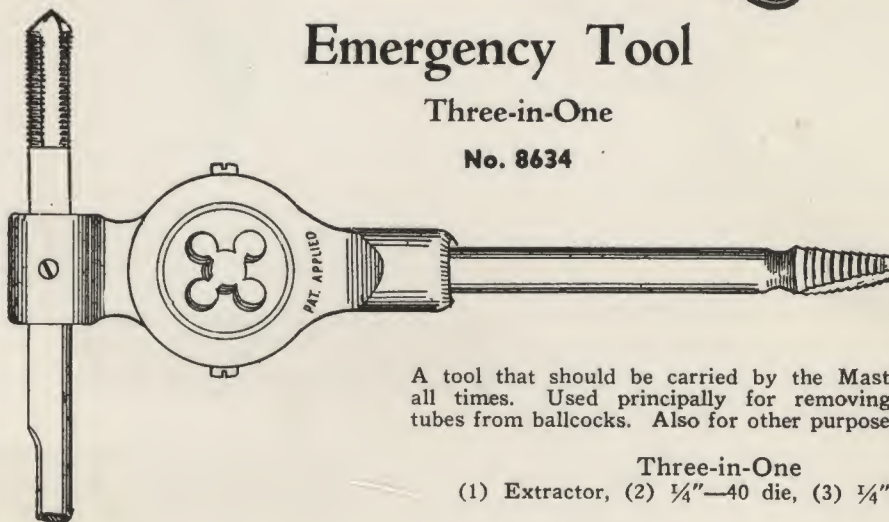
A real high-grade Trouble Light. Supplied with 25 ft. of heavily insulated rubber cord, a reflector shade inside the wire guard, hook at end of wire guard for hanging up on pipes or nails and also a ball joint rubber insulated clamp grip, for holding fast in those out-of-the-way places. Strong and sturdily built.



Emergency Tool

Three-in-One

No. 8634



A tool that should be carried by the Master Plumber at all times. Used principally for removing broken refill tubes from ballcocks. Also for other purposes.

Three-in-One

(1) Extractor, (2) $\frac{1}{4}$ "—40 die, (3) $\frac{1}{4}$ "—40 tap

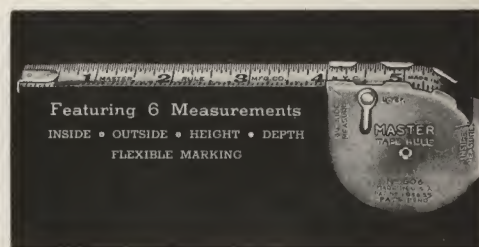
Aluminum Level



No. 8635

Die cast aluminum, length 9", width $\frac{5}{8}$ ", height $1\frac{1}{4}$ ". Weight 4 ozs. One plumb, one level and 45° vial with colored fluid, accurately marked. Grooved bottom for use on shafting. Top plate polished, satin finished sides. A pocket size all purpose level. Light, accurate and strong.

Master Rule Tape



No. 8636

Light and handy to carry in the pocket. Flexible metal rule, 72 in. long. With it you can make inside measurements, outside measurements, Height gauge, Depth gauge. Has precision lock.



Woodward Wanger Co.



Tools for Lead Work



Nos. 8653-8656
Drift Plugs
Lignum Vitae

No.	Diameter	Length
8653.....	1 in.	3 in.
8654.....	1 1/4 in.	3 in.
8655.....	1 1/2 in.	3 in.
8656.....	2 in.	4 in.



Nos. 8660-8662

Turn Pins
Lignum Vitae

No.	Length	Largest Diameter
8660.....	3 in.	1 3/4 in.
8661.....	3 1/2 in.	2 in.
8662.....	4 in.	2 1/4 in.



Lead Dresser

Lignum Vitae
Length Over All
11 1/2 in.

No.
8669.....



Nos. 8672-8673

Tap Borers
Short and Long Patterns

No.	Description
8672.....	Short (New York) Pattern
8673.....	Long (Philadelphia) Pattern



No. 8670

Shave Hooks
Oval and Triangular

No.	Shape
8670.....	Oval
8671.....	Triangular



Woodward Wanger Co.



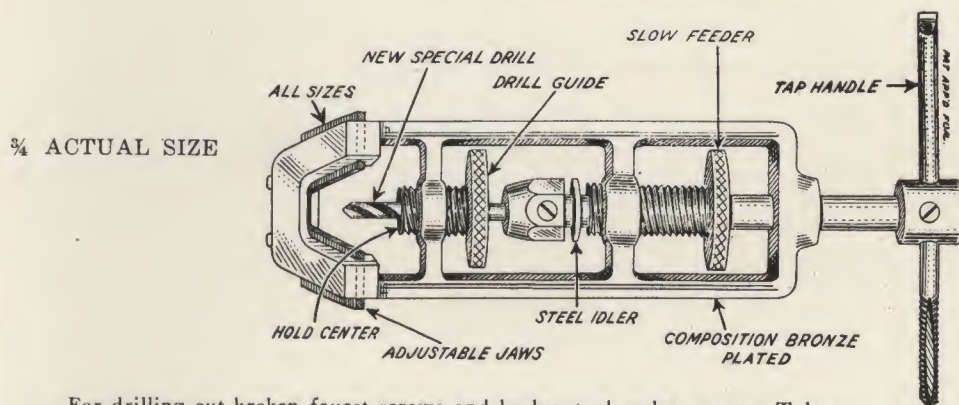
Twist Drills and Hand Drills



No.	Size	No.	Size
8677.....	$\frac{1}{8}$ in.	8682.....	$\frac{7}{8}$ in.
8678.....	$\frac{3}{16}$ in.	8683.....	$\frac{1}{4}$ in.
8679.....	$\frac{1}{8}$ in.	8684.....	$\frac{5}{16}$ in.
8680.....	$\frac{3}{8}$ in.	8685.....	$\frac{3}{8}$ in.
8681.....	$\frac{3}{16}$ in.		

Plumber's Hand Drill

WITH MANY NEW FEATURES

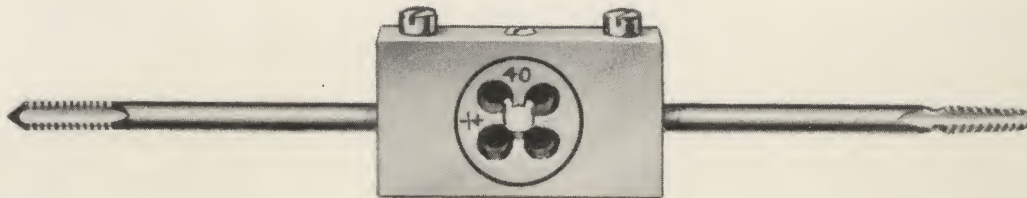


For drilling out broken faucet screws and broken tank valve screws. Takes $\frac{9}{32}$ " tap.

No. 8689.....Drill as Shown

Extractor, Tap and Die

For Refill Tubes and Float Rods



For Extracting Refill Tubes from Ballcocks and Re-threading the tubes, also for extracting Float rods and Re-threading the rods.

No. 8690— $\frac{1}{4}$ —40 Tap and Die for Refill Tube, and Extractor.
No. 8691— $\frac{1}{4}$ —20 Tap and Die for Float Rods and Extractor.



Woodward Wanger Co.



Wood Auger Bits,



No.	Drills holes for	Size	No.	Drills holes for	Size
8695	.....	$\frac{1}{2}$ "	8700	.....	$1\frac{1}{4}$ "
8696	$\frac{3}{8}$ " I. P.	$\frac{3}{4}$ "	8701	1" I. P.	$1\frac{1}{2}$ "
8697	$\frac{1}{2}$ " I. P.	$\frac{7}{8}$ "	8702	$1\frac{1}{4}$ " I. P.	$1\frac{3}{4}$ "
8698	.....	1"	8703	$1\frac{1}{2}$ " I. P.	2"
8699	$\frac{3}{4}$ "	$1\frac{1}{8}$ "	8703-A	2" I. P.	$2\frac{1}{2}$ "

Expansion Bit



This Bit is capable of being adjusted to a limit of 1/1000 of an inch by use of the micrometer screw which controls the adjustment. When adjusted to the desired size, any number of holes can be bored, and each hole will be of exactly the same size, as the cutters cannot slip or creep.

No.	Description	Capacity of Cutters
8704	..... Bit with two cutters.	$\frac{5}{8}$ to $1\frac{1}{8}$ in., $1\frac{1}{8}$ to 2 in.
8705	..... Bit with two cutters.	$\frac{7}{8}$ to $1\frac{3}{4}$ in., $1\frac{3}{4}$ to 3 in.

Wiping Cloths



Herringbone

Plain No.	Treated No.	Size
8719	T-8719	$2\frac{1}{2}$ x $2\frac{1}{2}$ in.
8721	T-8721	3 x 3 in.
8723	T-8723	$3\frac{1}{2}$ x $3\frac{1}{2}$ in.
8724	T-8724	$3\frac{1}{2}$ x 4 in.

Genuine Herringbone Ticking

No. 8730 Width 36 in.

Moleskin Wiping Cloths

Plain No.	Treated No.	Size
8744	T-8744	$2\frac{1}{2}$ x $2\frac{1}{2}$ in.
8746	T-8746	3 x 3 in.
8748	T-8748	$3\frac{1}{2}$ x $3\frac{1}{2}$ in.
8749	T-8749	$3\frac{1}{2}$ x 4 in.

Genuine Moleskin Cloth—Imported

No. 8755 Width 27 in.





Woodward Wanger Co.



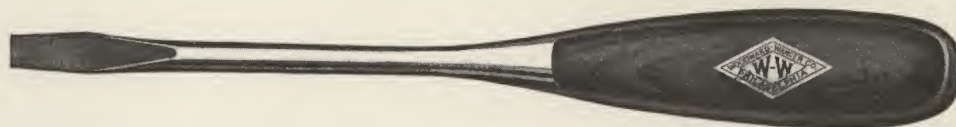
Tinners' Snips

Wiss



No.			
8765	.....	Cuts 4 in.	8767 Cuts 3 in.
8766	.....	Cuts 3 1/2 in.	8768 Cuts 2 1/2 in.

Screw Drivers



No.		Length of Blade
8788	.....	4 in.
8789	.....	6 in.
8790	.....	8 in.
8791	.....	10 in.

Bibb Seat Dresser



No.	Description
8793	Faucet Seat Dresser, complete with one each of the following sizes of cutters: Cutter, 7/8 in. diam. for use with 3/8 in. Faucet. Cutter, 5/8 in. diam. for use with 1/2 in. Faucet. Cutter, 3/4 in. diam. for use with 5/8 in. Faucet. Cutter, 1/2 in. diam. for use with 3/4 in. Faucet.

EXTRA CUTTERS

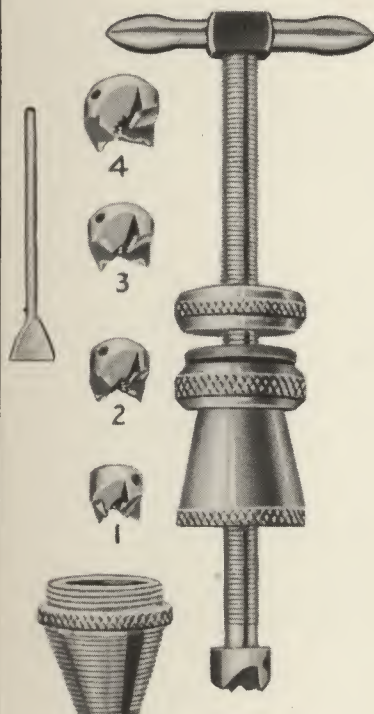
No.		Size
8794	7/8 in.
8795	5/8 in.
8796	3/4 in.
8797	1/2 in.
8798	1 in.



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Ferrell Bibb Seat Dresser



8 Outstanding Features

- (1) The New Improved Ferrell Reseating Tool will produce a raised round seat.
- (2) It is non-chattering and compact, taking up little room in the tool kit.
- (3) The simplicity of it makes it easy to operate.
- (4) It does the finest of workmanship which is 100% true.
- (5) The extra-long feed screw will permit it to be used on all types of bibbs and built-in fixtures.
- (6) The new friction lock nut and swivel arrangement permits you to feed and cut but a small fraction of an inch without loosening the friction nut.
- (7) Will avoid digging into the seat or cutting seat too deep.
- (8) Ferrell Faucet Tool is compact and is indispensable to every Master Plumber.

No. 8800—Ferrell Bibb Seat Dresser, as Illustrated

This set includes one $8\frac{1}{2}$ " Feed Screw, for use on Built-in Tub Fixtures. One Swivel Body with Lock Nut. One Cushion Washer. One Male Combination Reducing Cone with inside and outside thread. Four self-aligning Tool Steel Cutters that cut a raised, round seat. One pin for removing cutters.

Catalog Numbers of the Four Cutters Supplied With No. 8800

No. 8800-B	Size $\frac{5}{8}$ " O. D.	No. 8800-C	Size $1\frac{1}{16}$ " O. D.
No. 8800-D	Size $\frac{3}{4}$ " O. D.	No. 8800-E	Size $27/32$ " O. D.

Other Cutters That Also Fit No. 8800 Tool

No. 8800-A	Size $\frac{1}{2}$ " O. D.	No. 8800-H	Size $45/64$ " O. D.	No. 8800-L	Size 1" O. D.
No. 8800-F	Size $9/16$ " O. D.	No. 8800-J	Size $13/16$ " O. D.	No. 8800-M	Size $1\frac{1}{8}$ " O. D.
No. 8800-G	Size $21/32$ " O. D.	No. 8800-K	Size $15/16$ " O. D.	No. 8800-N	Size $1\frac{1}{4}$ " O. D.

Washer Cutter

Nickel-Plated Steel



Made of finely tempered Tool Steel, for cutting Washers from Leather, Rubber, Cloth Fabric and Mica. Will cut Washers $\frac{1}{2}$ " to $5\frac{1}{4}$ " in diameter.

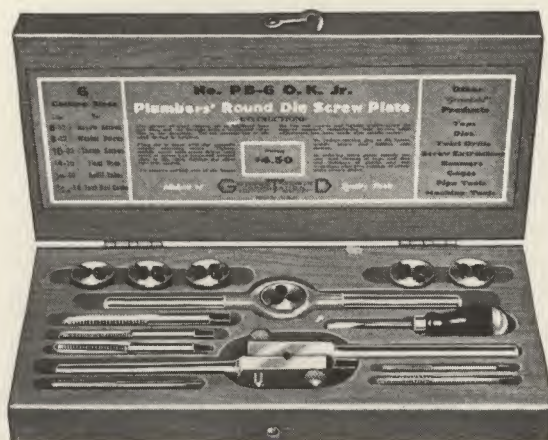
No. 8814 $4\frac{1}{4}$ " long



Woodward Wanger Co.



Tap and Die Set



This set of Taps and Dies is indispensable for servicing bathroom fixtures and general faucet repairs.

DESCRIPTION

No. 8842—Complete set of Taps and Dies, includes one stock, one tap wrench, one small screwdriver and one each tap and die of the following sizes:

DIES

No. 8848—8-32
No. 8850—10-32
No. 8851—10-24
No. 8852—10-28
No. 8853— $\frac{1}{4}$ -20
No. 8854— $\frac{1}{4}$ -40

TAPS

No. 8859—8-32
No. 8861—10-32
No. 8862—10-24
No. 8863—10-28
No. 8864— $\frac{1}{4}$ -20
No. 8865— $\frac{1}{4}$ -40

Diameter of Dies, $\frac{13}{16}$ " O. D. Length of stock, $\frac{6}{16}$ "

Stocks and Dies

Improved
Pattern Adjustable Stocks
and Pipe Dies

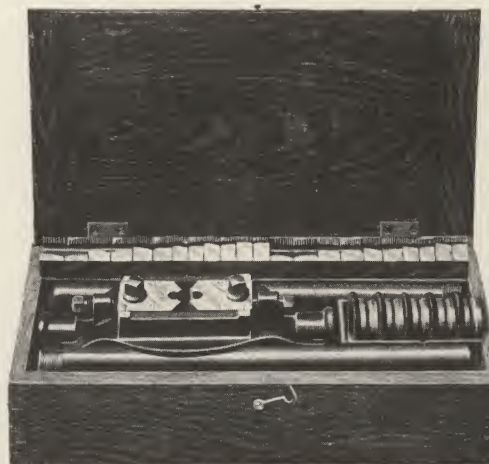
ARMSTRONG PATTERN

NO. 1 STOCK AND DIES

No.	Description
8875	Complete Set—Consisting of one No. 1 Stock and one each $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$ and $\frac{1}{2}$ in. Dies
8877	No. 1 Stock only

NO. 2 STOCK AND DIES

No.	Description
8890	Complete Set—Consisting of one No. 2 Stock and one each $\frac{1}{4}$, $\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 in. Dies
8891	No. 2 Stock only



EXTRA DIES FOR NO. 1 STOCK

No.	Size
8879	$\frac{1}{8}$ in.
8880	$\frac{1}{4}$ in.
8881	$\frac{3}{8}$ in.
8882	$\frac{1}{2}$ in.

EXTRA DIES FOR NO. 2 STOCK

No.	Size
8892	$\frac{1}{8}$ in.
8893	$\frac{1}{4}$ in.
8894	$\frac{3}{8}$ in.
8895	$\frac{1}{2}$ in.
8896	$\frac{3}{4}$ in.
8897	1 in.

EXTRA PARTS FOR NO. 1 STOCK

No.	Description
8883	Guide
8885	Handles
8886	Collar Screw
8887	Adjusting Screw
8888	Guide Screw
8889	Wrench

EXTRA PARTS FOR NO. 2 STOCK

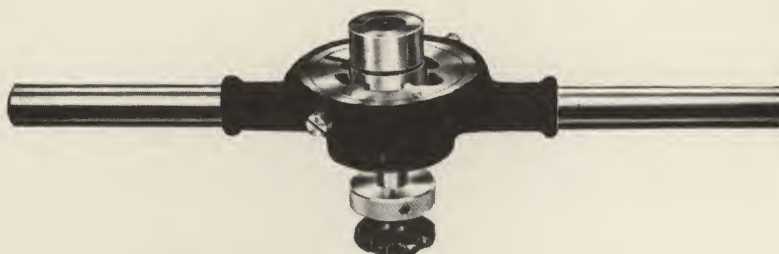
No.	Description
8898	Guide
8899	Handles
8900	Collar Screw
8901	Adjusting Screw
8902	Guide Screw
8903	Wrench



Woodward Wanger Co.



Thin Metal Tubing—Stock and Die



THE **Greenfield** Thin Metal Tubing Stock and Die is the first really satisfactory device ever produced for threading thin metal tubing. Because of the thin walls and easily scratched plated surface of thin metal tubing, old methods of threading with stocks equipped with external guides were very likely to crush the walls or mar the finish. This new device overcomes both of these difficulties.

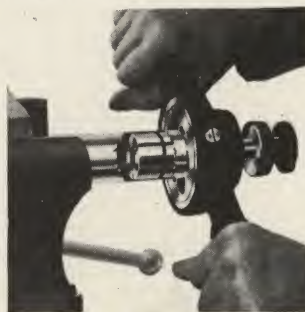
Internal Expansion Bushing Guide

The Stock, the body and handles of which are made of aluminum, has several new and improved features, the principal one being an Internal Expansion Bushing Guide, which fits tightly inside the tubing and does not revolve. This eliminates any possible inside scratches which might pick up waste material and cause the tubing to clog when in use. It also prevents the crushing or distortion of the thin walls of the nickel or chromium-plated tubing, and leads the die straight on to the work.

In operation the Internal Expansion Guide, one of which is furnished for each size die, is inserted into the tubing approximately the full length of the bushing, and is expanded against the walls (see phantom view below) by simply turning the expanding nut on the rear end of the draw bolt. The stock and die in this position are virtually "locked on" to the tubing, in perfect alignment, and are ready to start threading.

No Crooked Threads

Since it frequently happens that tubing is not cut off straight, there is a tendency in threading with other devices to start crooked threads, with the consequent danger of cutting through the thin walls. With the **Greenfield** stock and die "locked on" and in perfect alignment with the tubing, this tendency is entirely eliminated, and the stock with the free, easy-cutting Adjustable Round Split Dies, will produce straight, clean threads, and leave a spotless surface, both in and outside the tubing.



Internal Expansion Guide inserted in tubing holds stock firmly while threading.

No 8905—Includes one adjustable Round Split Die, and one internal Expansion Bushing Guide for each of the three cutting sizes. Tools packed in handsomely finished Hardwood Box as illustrated above. Regularly furnished with 27 Thread National Form, right-hand dies.

Cutting Sizes Furnished With

Set No 8905—

No. 8906—Size $1\frac{1}{4}$ " No. 8907—Size $1\frac{3}{8}$ " No. 8908—Size $1\frac{1}{2}$ "

Additional Cutting Sizes Obtainable

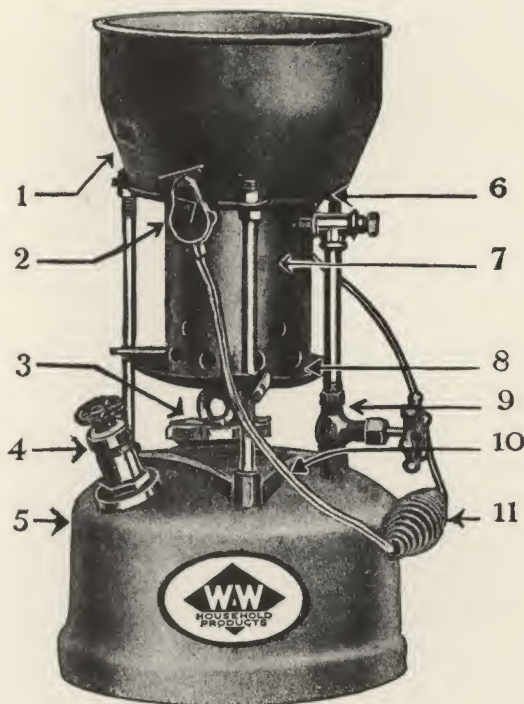
No. 8909—Size 1" No. 8910—Size $1\frac{1}{8}$ " No. 8911—Size 2"



Woodward Wanger Co.



Furnaces



No. 9113 furnace is the same as the No. 9114 except fitted with air valve and bulb instead of pump. Air valve has stuffing box nut to prevent leaks.

1. Shield is made in one piece from heavy sheet steel.
2. Handle holds soldering irons. To lower handle, turn to other side of furnace.
3. Reservoir has funnel. Filler plug has "DUST PROOF" CAP.
4. "NEVER LEAK" pump which is a positive guard against leaks.
5. Heavy seamless drawn steel reservoir and bottom. Three extra heavy bushings at top are brazed. Bottom is welded. **POSITIVELY NO SOFT SOLDER USED.** Capacity three-quarters gallon.
6. New style reinforced top plate permits user to remove entire assembly (connecting pipe, tee, coil, ell and burner) as merely unscrewing union.
7. Coil cup is made in one piece from heavy sheet steel.
8. Dished steel plate keeps heat from reservoir, catches over-flow from coil cup, also holds coil cup in place. By lowering this plate, coil cup can be lifted out. No nuts to unscrew.
9. Entire assembly (connecting pipe, tee, coil, ell and burner) removed by merely unscrewing union. Not necessary to unscrew any nuts or to remove top plate.
10. Malleable iron plate brazed to reservoir holds extra heavy uprights. Eliminates three openings.
11. Handle is made of coppered steel wire and has two nickel-plated malleable iron ears and nickel-plated wire grip.

All brass fittings and malleable iron castings are extra heavy. Coil made of $\frac{1}{8}$ " extra heavy pipe.

No. 9113..... $\frac{3}{4}$ -Gallon CapacityFurnace with Bulb
 No. 9114..... $\frac{3}{4}$ -Gallon CapacityFurnace with Pump

Repairs for the above furnaces

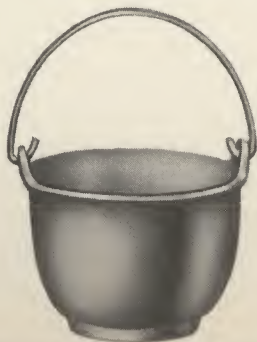
B-9066...Reducer
 B-9087...Dip Tube
 B-9088...Burner
 B-9089...Connecting Pipe Ell
 B-9090...Coil
 B-9091...Coil Cup

B-9092...Ell
 B-9093...Filler Plug
 B-9094...Handle Ears
 B-9095...Handle
 B-9096...Bottom Nut
 B-9097...Top Nut

B-9098...Air Valve
 B-9099...Plug
 B-9100...Pump
 B-9101...Reservoir
 B-9102...Shield No. 1 (for 5 in. Pot)
 B-9103...Shield No. 24 (for 6 in. Pot)

B-9104...Tee
 B-9105...Top Plate
 B-9106...Upright
 B-9107...Valve
 B-9108...Wire for Coil
 B-9109...Shield No. 3

Repairs can be furnished for Clayton & Lambert Furnace No. 22A (See Price Book)



Melting Pots

Made from a very high grade of gray iron and equipped with strong steel handle.

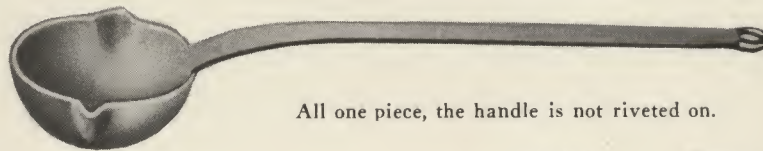
No.	Diameter	Depth	Capacity	Weight
9118	4 $\frac{3}{4}$ in.	3 in.	10 lbs.	3 $\frac{3}{4}$ lbs.
9119	5 $\frac{5}{8}$ in.	3 $\frac{3}{4}$ in.	15 lbs.	7 $\frac{1}{4}$ lbs.



Woodward Wanger Co.



Ladles



All one piece, the handle is not riveted on.

No.	Diameter	Depth	Length
9122	2½ in.	1¼ in.	13 in.
9123	3 in.	1⅜ in.	14 in.
9124	3½ in.	1½ in.	15 in.
9125	4 in.	1¾ in.	16 in.
9126	5 in.	2 in.	17 in.

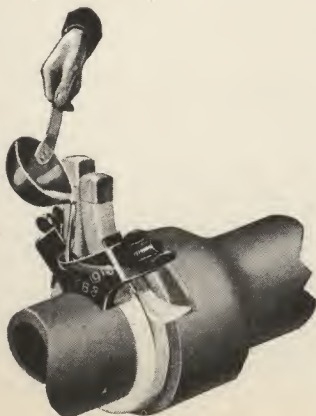
Asbestos Joint Runners



Asbestos Joint Runners—Square

Made from good quality of long fibered Asbestos. Well finished and fitted with strong, durable Clamp.

No.	Description
9130	For Pipe, 2, 3 and 4 in. Diameter
9131	For Pipe, 4, 5 and 6 in. Diameter
9132	For Pipe, 6, 8 and 10 in. Diameter
9133	Spring Clamp with Chain for use with above Joint Runners



Peerless Joint Runner

The clamps and thumb screws are of **wrought steel** and the pouring cup of **malleable iron**.

In operating this clamp it is only necessary to **release one end of the rope**. The steel thumb screws work on a **multiple thread** making the operation very rapid.

The "PEERLESS" holds the rope more snugly and firmly around the pipe than others, and as it stands upright, it is more convenient to pour into than the old style joint runner.

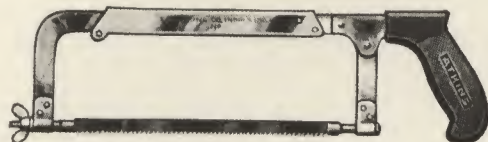
No.	Description
9134	For Pipe, all sizes, 2-6 in.



Woodward Wanger Co.



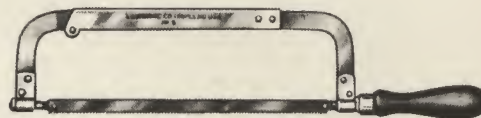
Hack Saw Frames



No. 9149

Pistol-Grip Hack Saw Frame. Polished Nickel Plate. Adjustable for blades 8" to 12" long. Open-grip, hard-rubber handle. Frame of high-grade steel, 3/16" thick and 11/16" wide. Will cut at four different angles.

No. 9149Hack Saw Frame



No. 9150

Extension Frame. Polished Nickel Plate. Made of high-grade steel, 3/16" thick and 5/8" wide. Black lacquered polished wood handle. Adjustable for blades 8" to 12" long. Will cut at four different angles.

No. 9150Hack Saw Frame

Midget Hack Saw Frame



A handy tool for the Master Plumber. Inexpensive and indispensable. For those small and hard-to-get-at places. Takes a 6" Wave-Set Blade; 32 teeth to the inch.

No. 9151Frame Only

Blades for Midget Frame

These Wave-Set Blades are 6" long and have 32 teeth to the inch. Thickness, .014. Made expressly for use with Midget Hack Saw Frame No. 9151.

No. 9152Midget Blades

Hack Saw Blades



The above cut shows the principle of our "Flexible Back" Blades. The teeth only are hardened, the back remaining in an untempered condition, which prevents the blade breaking, thus insuring the user full efficiency until the teeth are worn. Made of Tungsten Alloy Steel.

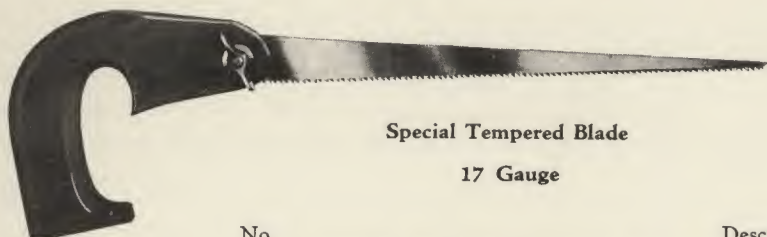
32 Teeth to inch			24 Teeth to Inch		
No.	Size		No.	Size	
9155.....	8 in.		9159.....	8 in.	
9157.....	10 in.		9161.....	10 in.	
9158.....	12 in.		9162.....	12 in.	



Woodward Wanger Co.



Compass Saws



Special Tempered Blade

17 Gauge

No.	Description
9163	Compass Saw Nest (Including one each, 10 in., 12 in. 14 in. Blades and Wood Handle)

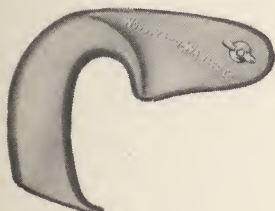
The 14 in. Blade furnished with this Nest is specially tempered for cutting wood in which nails are imbedded, lead pipe, and other obstructions encountered in the ordinary course of plumbing.

Compass Saw Blades

No.	Size	Description
9164.....	10 in.	Small Blades
9165.....	12 in.	Similar to 10 in. Blade.
9166.....	14 in.	Medium size Blade illustrated in No. 9163
9166-A.....	14 in.	Tempered to cut nails, lead pipe, etc.
9167.....	16 in.	Large Blade,

Wood Handles for Compass Saws

No.	
9168.....	Wood Handle, with Tightener



Aluminum Handles for Compass Saws

No. 9171	Aluminum Handle with Tightener
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Plumbers' Torch

Reservoirs of heavy, seamless, drawn brass. Patented "Never Leak" Pumps have the screw-down feature. When plunger is screwed down and out of the way, the tapered point on the bottom of the plunger acts as a positive check valve, providing safety and preventing leaks. The funnel-shaped brass bottoms are fitted with filler plugs to permit easy bottom filling. One of the most popular of all Plumber's Torches.

No.	
9173.....	Plumber's Torch (One quart capacity)

PARTS FOR TORCH

No.	
9174	Air Pump
9175	Corks
9176	Springs
9177	Cups
9178	Burner, complete



FOR GASOLINE



Woodward Wanger Co.

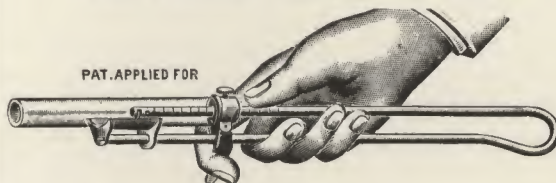


Malleable Iron Oil Can

This can is made with malleable iron body, spring-brass bottom and sheet-steel spout. It is carefully tested for leaks and painted with rust-proof bronze paint.

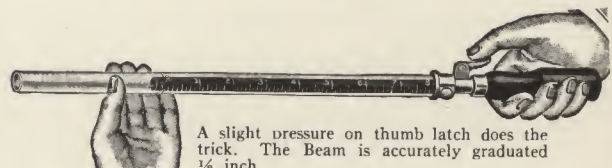
No.	Diameter
9179.....	3 1/4 in.

The Fletcher Gauge Glass Cutter



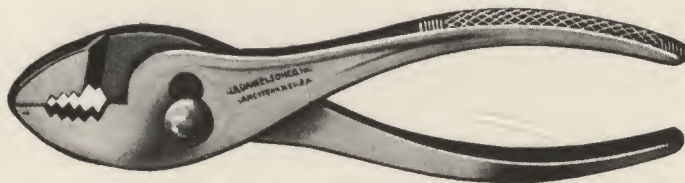
No.	Description
9184.....	Gauge Glass Cutter

The Wilkins Gauge Glass Cutter



No.	Capacity	Weight
9185.....	Cuts to 8 in. lengths	6 oz.

Plumber's Pliers



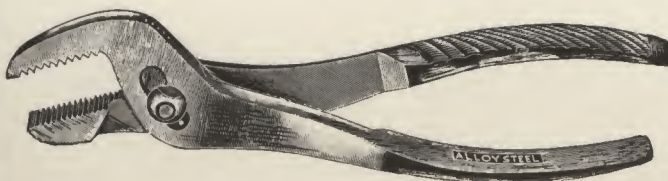
Made with knurled handles. A well-proportioned, drop-forged, combination plier with wire cutter.

No. 9186	6 in.
No. 9186A	8 in.
No. 9186B	10 in.



This bent-nosed plier is made with 30-degree offset nose, which permits its use in many places that are inaccessible with the ordinary straight-nose plier.

No. 9187	8 in.
No. 9187A	10 in.



Made of finest-grade alloy steel. Has three adjustments for extending the opening, instead of the usual two. Jaws so constructed that it can be used where ordinary pliers will not fit.

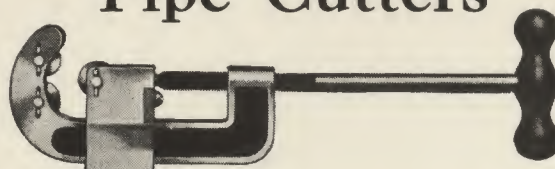
No. 9188	Regular Weight.....	8 in.
No. 9188A	Thin design, four adjustments ..	10 in.



Woodward Wanger Co.



Pipe Cutters



Barnes Three-Wheel Pipe Cutters

The Three-Wheel Cutter is especially suited for use in close work, where it is impossible to revolve the cutter entirely around the pipe. Both Wheels and Pins are made from the best grade of crucible steel, carefully machined and hardened in oil to give additional toughness.

No.	Description	
9197	Pipe Cutter No. 1.....	Cuts Pipe $\frac{1}{8}$ to 1 in.
9198	Pipe Cutter No. 2.....	Cuts Pipe $\frac{1}{2}$ to 2 in.
9199	Pipe Cutter No. 3.....	Cuts Pipe $1\frac{1}{2}$ to 3 in.

Pipe Cutter Repair Parts



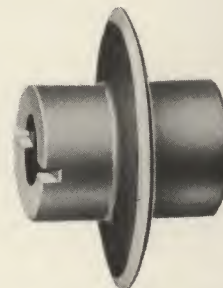
Barnes Pipe Cutter Parts WHEELS

No.	Description
9230	Wheels for No. 1 Barnes
9231	Wheels for No. 2 Barnes
9232	Wheels for No. 3 Barnes
9233	Wheels for No. 4 Barnes



Saunders Pipe Cutter Parts WHEELS

No.	Description
9240	Wheels for No. 1 Saunders
9241	Wheels for No. 2 Saunders
9242	Wheels for No. 3 Saunders



Trimo Pipe Cutter Parts WHEELS

No.	Description
9255	Wheels for No. 1 Trimo
9256	Wheels for No. 2 Trimo



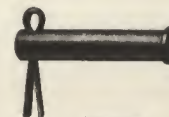
PINS

No.	Description
9235	Pins for No. 1 Barnes
9236	Pins for No. 2 Barnes
9237	Pins for No. 3 Barnes
9238	Pins for No. 4 Barnes



PINS

No.	Description
9245	Pins for No. 1 Saunders
9246	Pins for No. 2 Saunders
9247	Pins for No. 3 Saunders



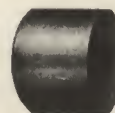
PINS

No.	Description
9258	Pins for No. 1 Trimo
9259	Pins for No. 2 Trimo



ROLLERS

No.	Description
9250	Rollers for No. 1 Saunders
9251	Rollers for No. 2 Saunders
9252	Rollers for No. 3 Saunders



ROLLERS

No.	Description
9261	Rollers for No. 1 Trimo
9262	Rollers for No. 2 Trimo



Woodward Wanger Co.



Genuine Stillson Pipe Wrenches



WITH STEEL HANDLES

No.	Size	Takes Pipe
9293.....	6 in.	$\frac{1}{8}$ to $\frac{1}{2}$ in.
9294.....	8 in.	$\frac{1}{8}$ to $\frac{3}{4}$ in.
9295.....	10 in.	$\frac{1}{8}$ to 1 in.
9296.....	14 in.	$\frac{1}{4}$ to $1\frac{1}{2}$ in.

WITH STEEL HANDLES

No.	Size	Takes Pipe
9297.....	18 in.	$\frac{1}{4}$ to 2 in.
9298.....	24 in.	$\frac{1}{4}$ to $2\frac{1}{2}$ in.
9299.....	36 in.	$\frac{1}{4}$ to $3\frac{1}{2}$ in.

JAWS

No.	Size
9300.....	6 in.
9301.....	8 in.
9302.....	10 in.
9303.....	14 in.
9304.....	18 in.
9305.....	24 in.
9306.....	36 in.

Genuine Stillson Pipe Wrench Repairs

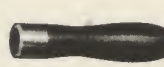


Jaw



Frame

Nos. 9300-9355



Handle



Nut

FRAME PINS

No.	Size
9336.....	6 in.
9337.....	8 in.
9338.....	10 in.
9339.....	14 in.
9340.....	18 in.
9341.....	24 in.
9342.....	36 in.

FRAMES

No.	Size
9308.....	6 in.
9309.....	8 in.
9310.....	10 in.
9311.....	14 in.
9312.....	18 in.
9313.....	24 in.
9314.....	36 in.

NUTS FOR JAW

No.	Size
9320.....	6 in.
9321.....	8 in.
9322.....	10 in.
9323.....	14 in.
9324.....	18 in.
9325.....	24 in.
9326.....	36 in.

SPRING PINS

No.	Size
9328.....	6 in.
9329.....	8 in.
9330.....	10 in.
9331.....	14 in.
9332.....	18 in.
9333.....	24 in.
9334.....	36 in.

END NUTS

No.	Size
9344.....	6 in.
9345.....	8 in.
9346.....	10 in.
9347.....	14 in.

WOOD HANDLES

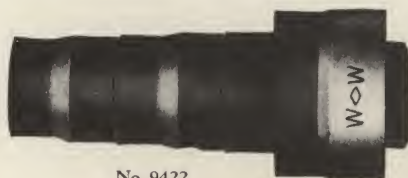
No.	Size
9316.....	6 in.
9317.....	8 in.
9318.....	10 in.
9319.....	14 in.

SPRINGS

No.	Size
9349.....	6 in.
9350.....	8 in.
9351.....	10 in.
9352.....	14 in.
9353.....	18 in.
9354.....	24 in.
9355.....	36 in.

"W.W." Tubing Expanders

For Joining and Lengthening Nickel-Plated Tubing



No. 9422



No. 9423



No. 9424

No.	Description
9422	Complete Set, for $1\frac{1}{4}$, $1\frac{3}{8}$, $1\frac{1}{2}$ and 2 in. tubing

No.	Description
9423	For $1\frac{1}{4}$, $1\frac{3}{8}$ and $1\frac{1}{2}$ in. tubing

No.	Description
9424	For 2 in. tubing only

The "W.W." Tubing Expander in Use



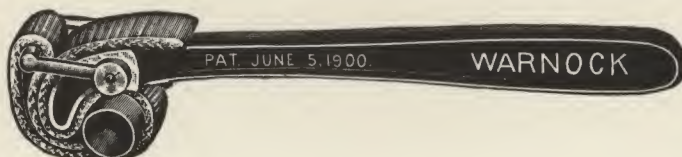
The "W.W." Tubing Expanders are made of high-grade tool steel and will last indefinitely. By driving the tool into the end of tubing it is expanded sufficiently for a distance of $\frac{1}{2}$ inch, so that another piece of tubing of the same size can be inserted and sweat in. Tubing lengthened by this method always presents an attractive appearance, and the work can be neatly and quickly done without the use of a collar.



Woodward Wanger Co.



The Warnock Wrench



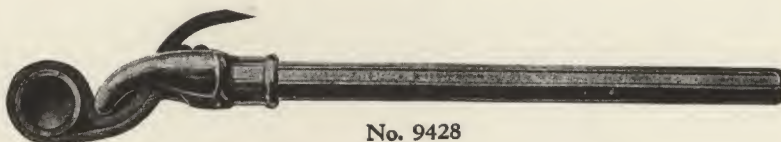
For Polished and Nickel Plated Pipe

This wrench has been, for many years, the standard among plumbers for a light, convenient and reliable tool for installing polished and N. P. pipe. Furnished complete with looped strap.

No.	Description
9426.....	12 in. Takes Pipe $\frac{1}{4}$ to 2 in.
9427.....	18 in. Takes Pipe $\frac{1}{2}$ to 5 in.

The Reed Wrench

For Nickel
Plated Pipe



No. 9428

No.	Description
9428.....	12 in. Takes Pipe $\frac{1}{8}$ to 2 in.

Straps for Wrenches for Nickel Plated Pipe



Strap (Plain)

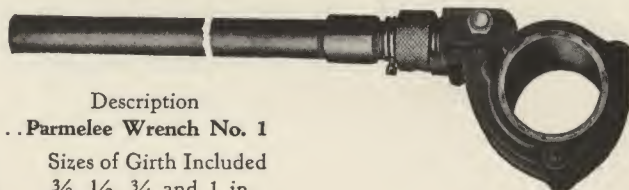
No.	Description
9433.....	12 in. Plain Strap for 12 in. Wrench
9434.....	18 in. Plain Strap for 18 in. Wrench



Strap (Looped)

No.	Description
9436.....	12 in. Looped Strap for 12 in. Wrench
9437.....	18 in. Looped Strap for 18 in. Wrench

The Parmelee Wrench



No.	Description
9442.....	Parmelee Wrench No. 1
SIZES OF GIRTH INCLUDED	
Takes Pipe $\frac{3}{8}$ to 1 in.	$\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$ and 1 in.

Extra Girths for Parmelee Wrenches

GIRTHS FOR NO. 1 WRENCH

No.	To Hold Pipe	No.	To Hold Pipe
9446.....	$\frac{3}{8}$ in.	9448.....	$\frac{3}{4}$ in.
9447.....	$\frac{1}{2}$ in.	9449.....	1 in.



Woodward Wanger Co.



Soldering Coppers

Prices do not include handles.



No.	Weight Each	Weight Per Pair	No.	Weight Each	Weight Per Pair
9470	1/2 lb.	1 lb.	9473	1 1/2 lbs.	3 lbs.
9471	3/4 lb.	1 1/2 lbs.	9474	2 lbs.	4 lbs.
9472	1 lb.	2 lbs.			

Soldering Iron Handles



No.	Adjustable Pattern
9475	Adjustable



No.	Regular Pattern
9476	Regular

Vulcan Pipe Vise Mount

This serviceable combination consists of three superior drop forgings, drilled and threaded, ready to receive suitable lengths of standard pipe for use as legs. This will make a firm and portable stand for use anywhere which may be easily transported from place to place.



Drop-Forged Arm for Base of Mount



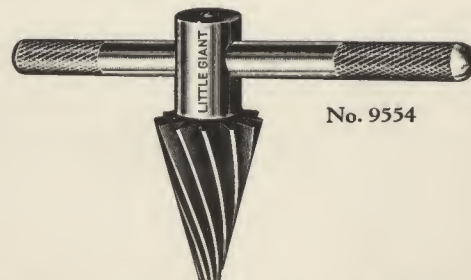
No.	For Vulcan Vise	Description
9548	No. 1	Three drilled and threaded Arms with Bolts and Nuts—Less Legs
9549	No. 2	Three drilled and threaded Arms with Bolts and Nuts—Less Legs

Spiral Fluted Burring Reamers

FOR PIPE. ALSO FOR COUNTERSINKING



Nos. 9550-9553



No. 9554

No.	Total Length	Length of Flute	Size at Point	Size at Large end	Style of Shank	For Reaming Pipe
9550	3 in.	1 in.	3/2 in.	3/4 in.	Bit Brace	1/8 to 1/2 in.
9551	3 1/8 in.	1 1/8 in.	7/8 in.	1 3/8 in.	Bit Brace	3/8 to 1 in.
9552	4 1/8 in.	2 1/8 in.	1 1/8 in.	1 3/2 in.	Bit Brace	1/4 to 1 1/4 in.
9553	5 1/4 in.	2 1/2 in.	1 3/8 in.	2 3/8 in.	Bit Brace	1/4 to 2 in.
9554	5 3/8 in.	3 1/8 in.	1 7/8 in.	2 3/2 in.	T Handle 20 in. long	1/4 to 2 in.



Woodward Wanger Co.



Soil Pipe Testing Plugs

WING NUT PATTERN

No.	Size
9600	2 in.
9601	3 in.
9602	4 in.
9603	5 in.
9604	6 in.

"Y" BRANCH DOUBLE TESTING PLUGS

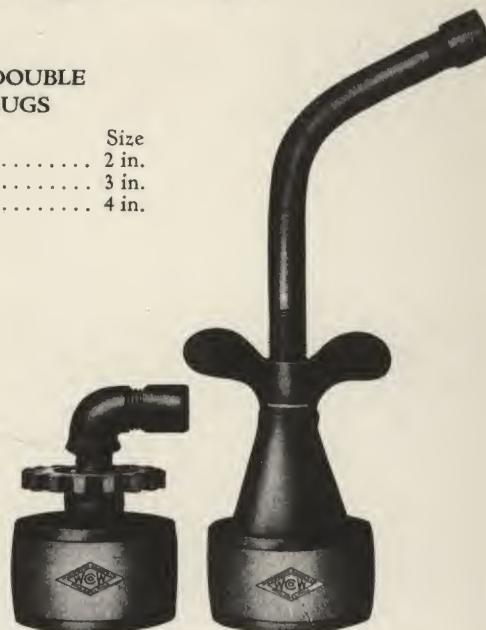
No.	Size
9614	2 in.
9615	3 in.
9616	4 in.

RATCHET PATTERN

No.	Size
9605	2 in.
9606	3 in.
9607	4 in.
9608	5 in.
9609	6 in.

WRENCH FOR RATCHET TESTING PLUG

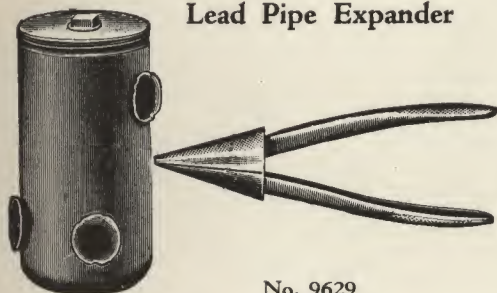
No.	Wrench
9610	



Nos. 9605-9609

Nos. 9600-9604

Lead Pipe Expander



No. 9629

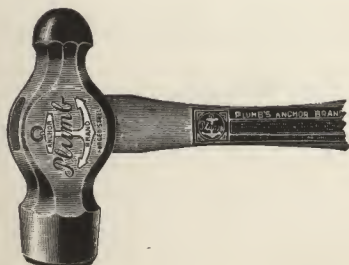
No.	Expander
9629	

Lead Pipe Cutter

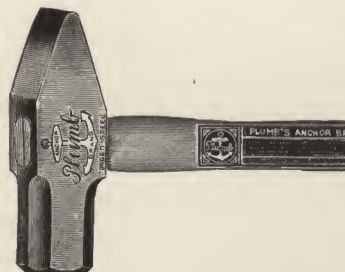


No.	Capacity up to 1½ in. pipe
9630	Cutter

Hammers



No.	Ball Pein Hammers	Weight
9643		1 lb.
9644		1¼ lb.



No.	Plumbers Hammers	Weight
9645		1 lb.
9646		1¼ lb.



N12-1341

